INFECTIOUS DISEASES

[Abstract:0011]

RATE AND PREDICTORS OF BLOOD CULTURE POSITIVITY AFTER ANTIBIOTIC ADMINISTRATION: A PROSPECTIVE SINGLE-CENTER STUDY

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Purpose: Blood culture obtainment prior to antibiotic administration, in patients with suspected infection, is considered best practice in international guidelines. However, there is little data regarding the effect of a single dose of antibiotics on blood culture sterilization.

Methods: We conducted a prospective study, enrolling consecutive patients with suspected infection, hospitalized in an internal medicine ward between December 2019 and January 2023. Included patients had a positive blood culture prior to antibiotic administration and a set of blood cultures taken within 24 hours after a single dose of antibiotics. The rate of patients with pathogen isolation after antibiotic administration was assessed. Logistic regression was performed to examine factors associated with blood culture positivity.

Results: A total of 155 patients were recruited for the study of which 131 (50.8% female, 77.5±13.4 years) met the inclusion criteria. The overall rate of patients with a positive blood culture after a single dose of antibiotics was 42.0% (55/131 patients). Increasing time between antibiotic administration and post antibiotic culture was an independent predictor for blood culture sterilization (odds ratio 0.89 [95% confidence interval, 0.83-0.97; p=0.006] for every 60 minutes).

Blood culture volume was an independent predictor for blood culture positivity in a sensitivity analysis which included 82 patients (OR=1.26 [95% CI, 1.03-1.57] for every 1 ml increase; p=0.024).

Conclusions: Blood culture positivity is reduced by antimicrobial therapy but remains high after a single dose of antibiotics. If cultures are not obtained prior to antibiotic administration, they should be obtained as soon as possible afterwards.

Keywords: *blood cultures, antibiotics, infection, microbiology, sepsis*

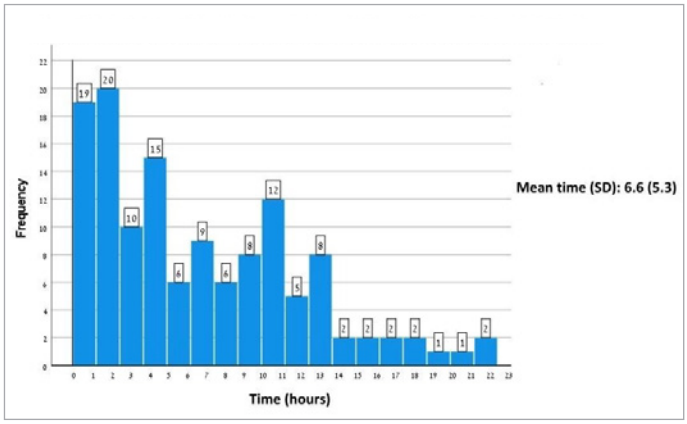

Figure 1. *Distribution of post antibiotic blood cultures obtainment by time.*

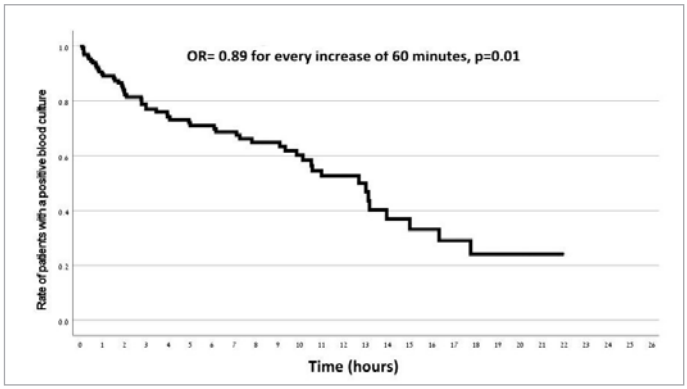

Figure 2. *Rate of patients with positive blood cultures.*

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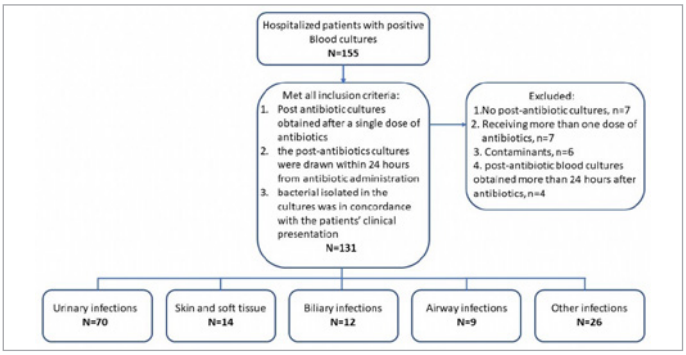

Figure 3. *Study inclusion process.*

	Total n=131	Negative post-antibiotic growth n=76	Positive post- antibiotic growth n=55	p-value
Clinical Features				
Age (years), mean±SD	77.5±13.6	77.6±15.8	77.4±9.8	0.93
Gender (female), n(%)	66(55.8)	43(57.3)	23(41.8)	0.08
Diabetes mellitus, n(%)	51(38.9)	29(38.2)	22(40.0)	0.83
Hypertension, n(%)	84(64.1)	50(65.8)	34(61.8)	0.64
Heart failure, n(%)	30(22.9)	17(22.4)	13(23.6)	0.86
COPD, n(%)	13(9.9)	7(9.2)	6(10.9)	0.75
Peripheral vascular disease, n(%)	12(9.2)	5(6.6)	7(12.7)	0.23
Liver cirrhosis, n(%)	5(3.8)	1(1.3)	4(7.3)	0.079
Permanent ICS, n(%)	6(4.6)	2(2.6)	4(7.3)	0.21
Permanent oral corticosteroids, n(%)	10(7.6)	5(6.6)	5(9.1)	0.59
Active solid malignancy, n(%)	39(29.8)	22(28.9)	17(30.9)	0.80
Active haematological malignancy, n(%)	12(9.2)	4(5.3)	8(14.5)	0.069
Chemotherapy in last six months, n(%)	17(13)	9(11.8)	8(14.5)	0.65
Immunotherapy in last six months, n(%)	8(6.3)	2(2.7)	6(11.3)	0.046
Antibiotic treatment, n(%) Cephalosporins Penicillins Aminoglycosides Other	64(48.9) 22(16.8) 21(16.0) 24(18.3)	46(60.5) 7(9.2) 9(11.8) 14(18.4)	18(32.7) 15(27.2) 12(21.8) 10(18.2)	0.004
Treated with two antibiotics, n(%)	36(27.5)	18(23.7)	18(32.7)	0.25
Laboratory tests before antibiotics				
Hemoglobin (g/dL), mean±SD	11.3±2	11.7±1.9	10.8±2.0	0.015
Platelets (10^3/µL), mean±SD	189.8±120.1	187.7±107.3	192.8±136.8	0.81
Creatinine (mg/dl), mean±SD	1.7±1.4	1.9±1.7	1.5±0.9	0.16
eGFR (CKD-EPI, ml/min/1.732), mean±SD	51.4±29.5	49.8±29.9	53.8±28.9	0.45
AST (IU/L), mean±SD	46.4±40.3	42.3±41.6	52±50.3	0.30
ALT (IU/L), mean±SD	44.3±33.8	40.7±31.0	49.3±38.3	0.45
Bilirubin (total; mg/dl), mean±SD	1.3±0.6	1.2±0.5	1.4±0.5	0.71
CRP (mg/L), mean±SD	144.2±98.4	147.1±101.4	140.2±94.8	0.69
Peak CRP (mg/L), mean±SD	199.7±90.0	193.8±91.3	207.8±88.4	0.38
Length of hospitalization (days), mean±SD	13.9±12.1	12.2±10.2	16.3±15.5	0.10
In-hospital mortality, n(%)	16(12.3)	3(4.0)	13(23.6)	<0.001

Table 1. *Patient characteristics.*
SD=Standard deviation; COPD=Chronic obstructive lung disease; ICS=Inhaled corticosteroids; eGFR=estimated glomerular filtration rate; CKD-EPI=Chronic kidney disease epidemiology collaboration; IU=International units; CRP=C-reactive protein; AST= Aspartate transaminase; ALT= Alanine transaminase.

	Total n=131	Negative post-antibiotic growth n=76	Positive post- antibiotic growth n=55	p-value
Bacteria susceptible to empirically administered antibiotics, n(%)	119(90.8)	73(96.1)	46(83.6)	0.015
Gram negative bacteraemia prior to antibiotics, n(%)	98(74.8)	61(81.3)	37(67.3)	0.09
Time between antibiotics and BCO, hours (SD)	6.66(5.3)	7.65(5.32)	5.26(4.99)	0.011
Pre-antibiotic blood cultures volume (ml), mean±SD	8.5±4.1	8.8±4.4	8.0±3.6	0.49
Post-antibiotic blood cultures volume (ml), mean±SD	6.6±3.0	6.2±2.5	7.1±3.5	0.18

Table 2. *Microbiological features.*
SD=Standard deviation; BCO=Blood culture obtainment.

Variable	Odds ratio	95% confidence interval	P-Value
Age (years)	0.99	0.96-1.03	0.80
Gender (female)	0.70	0.30-1.68	0.43
Source of infection	1.53	0.536-4.45	0.43
Treatment with two antibiotics	3.24	1.27-8.25	0.015
Hemoglobin (g/dL)	0.77	0.62-0.97	0.026
Time (60 minutes)	0.89	0.81-0.97	0.01
Hematological malignancy	3.20	0.60-17.20	0.17
Chemotherapy in last six months	0.35	0.83-1.52	0.16
Immunotherapy in last six months	2.61	0.32-21.13	0.37
Positive gram stain bacteria	1.71	0.52-5.59	0.37
Bacteria susceptible to the empirically administered antibiotics	0.16	0.03-0.80	0.026

Table 3. *Multivariate analysis of factors associated with blood culture positivity.*

[Abstract:0047]

THINKING MIND SHOULD CONTROL THE TEMPTING (TO OPERATE) HANDS

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Introduction: In clinical practice, there are lot of opportunities to implement new ideas and approach in treatment. In other words, we need to have out of box thinking. The following case show cause the advantages of conservative management.

Case Presentation: Mr. G, 30 years old male, a visually challenged person had suffered severe upper back pain, was treated in tertiary care hospital with no relief. Later the patient approached our hospital and based on the clinical picture and investigations found to suffer from TB Spine (Potts Disease) involving D2 to D8 and Para- spinal abscess on both sides. Treatment was planned to prevent the projected functional deformity of the spines.

Anti-Koch's Treatment AKT -4 (RIFA/INH/EMB/ PZA) for 2 months. Simultaneously he was referred for surgical intervention for the spines. He was denied surgery by orthopaedics, and we continued by AKT -3 (RIFA/INH/EMB) for 6 months, with periodic reviews. Patient found good relief from upper back pain that was his primary complaint and improved in appetite and weight. He came for final review after completing the AKT course and a Repeat CT scan was done. To our amazement the vertebras (D2 to D8) have healed and the para-spinal abscess has gone in for near total absorption.

Discussion and Learning Points: The agony and intolerance on the part of the patient make us to take swift decisions however can be stoical avoiding the anticipatory surgical intervention which not only favors the clinical practice but also improves the patient's morale.

Keywords: *nature, cure better, with medicines*

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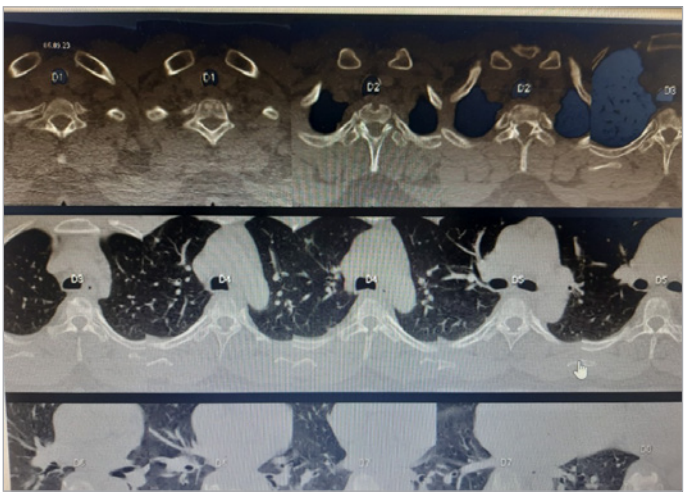

Figure 1. *Gopalakrishanan_CT_September_23.*
Repeat CT after completion of AKT for 8 months showing near total clearance of abscess.

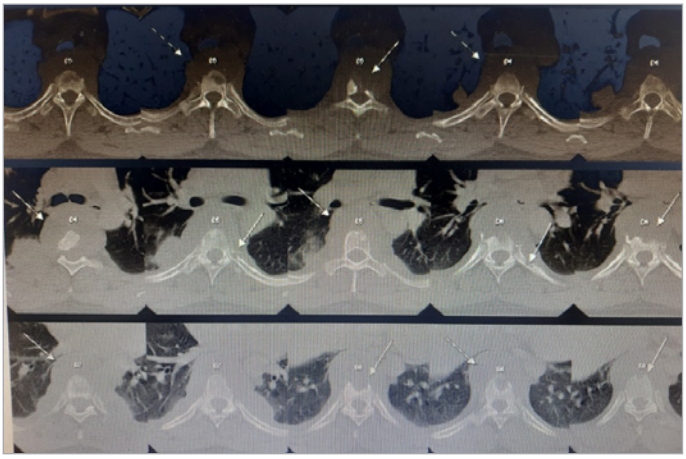

Figure 2. *Gopalakrishnan CT_JAN23.*
CT shows destruction of D2 to D8 vertebrae and paraspinal abscess.

[Abstract:0049]

AN INUSUAL CAUSE OF LOW BACK PAIN

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Approximately 15-25% of tuberculosis (TBC) infections involve extrapulmonary sites, depends on the geographic area and the disease's incidence. It is associated with reactivation of latent tuberculosis infection in patients with immunosuppression treatments or in some immigrated population.

A 34-year-old man from Colombia was admitted because of chronic low back pain from 1 year ago that didn't succeed with analgesic treatment. He was previously diagnosed of suspicious L1-L2 vertebra osteomyelitis in his reference medical centre 2 months before. Control MRI revealed an abscess in psoas muscle with persistent signs of osteomyelitis and inflammatory parameters. While pulmonary tuberculosis was discarded, taking into account bone disease chronicity, it was considered the high probability of spinal tuberculosis. Percutaneous puncture with biopsy and drainage to the abscess was performed. It could start treatment by TBC polymerase chain reaction (PCR) positive and then by the insolation of *Mycobacterium tuberculosis* in biopsy. After 3 weeks of lack adherence therapy and some treatment adverse effects, the patient was readmitted because of paraparesis in lower limbs. The patient was submitted to a surgical intervention by Neurosurgery Team because of there was a spinal cord compression. Then, he continued long term antibiotic therapy with significant clinical improvement.

Keywords: *spinal tuberculosis, psoas abscess, spinal cord compression*

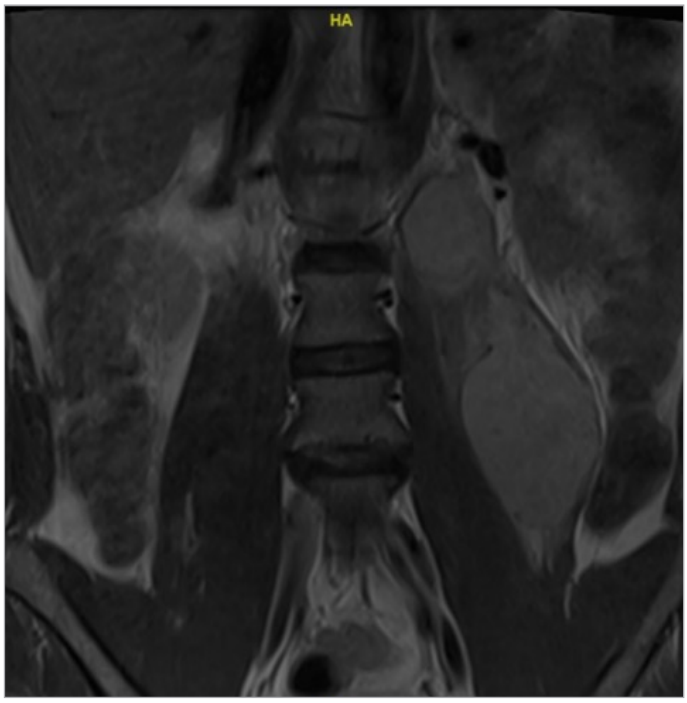

Figure 1. *Psoas abscess.*

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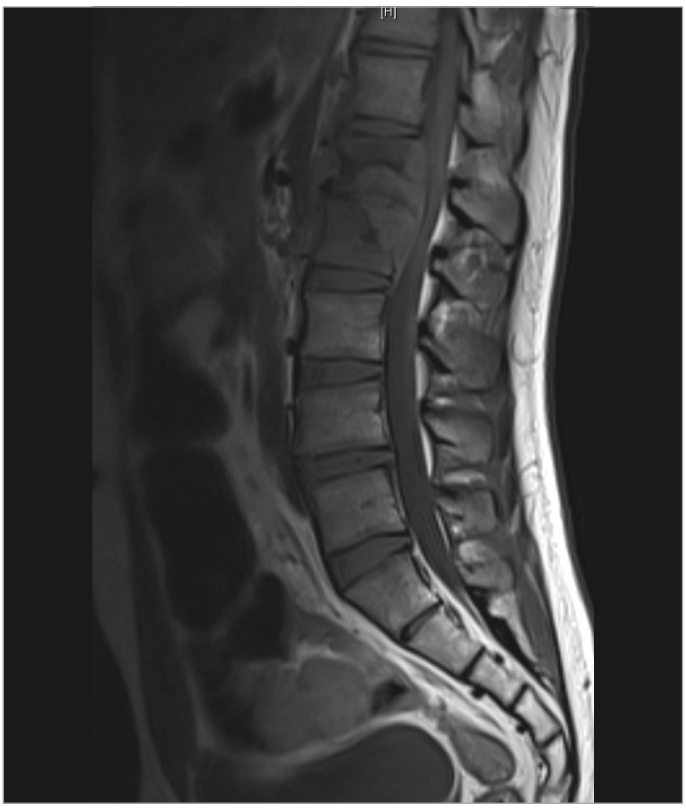

Figure 2. Spinal tuberculosis located in L1- L2 vertebra.

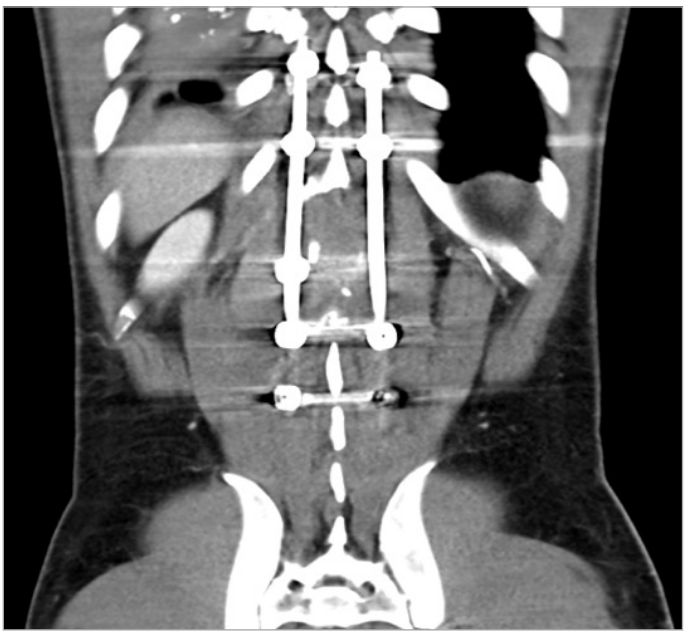

Figure 3. Spine after surgical intervention and antibiotic therapy.

[Abstract:0063]

IMPACT OF CARDIAC SURGERY IN LEFT-SIDED INFECTIVE ENDOCARDITIS WITH INTERMEDIATE-LENGTH VEGETATIONS

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Objectives: The best strategy to manage patients with left-sided infective endocarditis (IE) and intermediate-length vegetations (10-15 mm) remains uncertain. We aimed to evaluate the role of surgery in patients with intermediate-length vegetations and no other ESC guidelines-approved surgical indication.

Methods: We retrospectively enrolled 638 consecutive patients admitted to three academic centres (Amiens, Marseille and Florence University Hospitals) between 2012 and 2022 for left-sided definite IE (native or prosthetic) with intermediate-length vegetations (10-15 mm). We compared four clinical groups: medically (n=50) or surgically (n=345) treated complicated IE, medically (n=194) or surgically (n=49) treated uncomplicated IE.

Results: Mean age was 67 ± 14 years. Females were 182 (28.6%). The rate of embolic events on admission was 40% in medically treated and 61% in surgically treated complicated IE, 31% in medically treated and 26% in surgically treated uncomplicated IE. The analysis of all-cause mortality showed the lowest five-year survival rate for medically treated complicated IE (53.7%). We found a similar five-year survival rate for surgically treated complicated IE (71.4%) and medically treated uncomplicated IE (68.4%). The highest five-year survival rate was observed in surgically treated uncomplicated IE group (82.4%, log rank p<0.001). The analysis of the propensity score matched cohort estimated a hazard ratio of 0.23 for uncomplicated IE treated surgically compared to medical therapy (p=0.005, CI 95%: 0.079-0.656).

Conclusions: Our results suggest that surgery is associated with lower all-cause mortality than medical therapy in patients with uncomplicated left-sided IE with intermediate-length vegetations even in the absence of other guideline-based indications.

Keywords: intermediate-length vegetations, surgery, embolism, infective endocarditis

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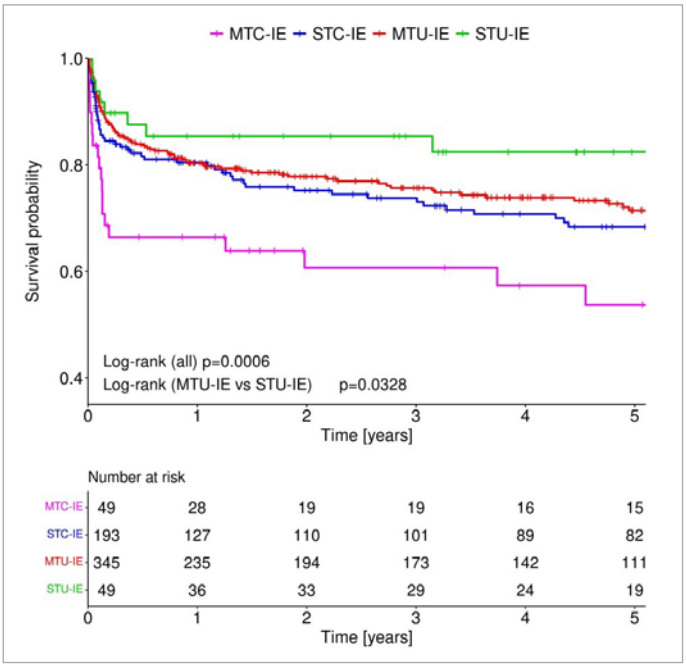

Figure 1. *Pre-match Kaplan-Meier analysis of survival probability of the four groups: medically treated complicated IE (MTC-IE), surgically treated complicated IE (STC-IE), medically treated uncomplicated IE (MTU-IE), surgically treated uncomplicated (STU-IE).*

[Abstract:0064]

DESCRIPTION OF URINARY TRACT INFECTION EPISODES CAUSED BY *LACTOBACILLUS* SPP

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Summary: *Lactobacillus* are part of the microbiota of the normal urinary mucosa, but they can have a potentially pathogenic role in certain circumstances.

Purpose: The purpose of this study was to describe and characterize urinary tract infections caused by *Lactobacillus* species.

Methods: A cross-sectional and descriptive study of isolates in urine samples was carried out with identification of *Lactobacillus* species over a period of four years.

Findings: A total of 23 isolates were included, of which 22% were male and 78% female, with a mean age of 73 years. There were 3 patients with a solid organ transplant (13%), 1 with active neoplasia (4%) and 39% of the patients with type 2 diabetes mellitus. In 22% there was an association with health care, 17.4% had a permanent urinary catheter and 2 of them had anatomical alterations in the urinary tract.

It should be noted that 35% had a history of taking antibiotics during the previous three months. Regarding the different species: *Lactobacillus gasseri/paragasseri* 10 (4.5%), *L. crispatus* 3 (13%), *L. delbrueckii* 3 (13%), *L. fermentum* 1 (4%), *L. jensenii* 4 (17.4%) and *L. rhamnosus* 2 (8.7%). On the other hand, clinical manifestations were described in 56.5% of patients, the most frequent being abdominal pain (34.8%), fever (26%) and dysuria (13%).

Conclusions: A monomicrobial urinary isolation of species of the genus *Lactobacillus* should not be given as a universal contaminant and should be taken into account especially in elderly patients with an indwelling bladder catheter, previous antibiotic loading.

Keywords: *Lactobacillus, urinary tract, infection*

[Abstract:0065]

CHARACTERIZATION OF URINARY TRACT INFECTION EPISODES SECONDARY TO *AEROCOCCUS* SPP

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Summary: Among the less frequent genitourinary pathogens is the genus *Aerococcus*, composed of gram-positive cocci in clusters and facultative anaerobes. The main species are *A. christensenii*, *A. urinae*, *A. sanguinicola* and *A. viridans*.

Purpose: The aim of this study is to describe the characteristics of episodes of urinary tract infection caused by *Aerococcus* spp.

Methods: A cross-sectional, descriptive study of isolates from urinary samples with identification of *Aerococcus* spp. over a four-year period in a tertiary care hospital.

Findings: A total of 29 isolates in urinary samples were included, corresponding to 12 women and 17 men, with a mean age of 73 years. Epidemiological findings included 10% of patients with solid organ transplantation, 6.9% of patients with active metastatic neoplasia and 17.24% of diabetic patients. In 17.24% the infection was associated with health care. A total of 10% of patients had a permanent bladder catheter, 10% had anatomical alterations in the urinary tract and another 10% had a history of antibiotic treatment in the previous three months.

Differentiating between species, in order of frequency: *Aerococcus urinae* 62%, *Aerococcus sanguinicola* 34.5% and *Aerococcus viridans* 3.4%. Regarding clinical manifestations, 23 out of 29 (79%) were symptomatic episodes, with fever (56.5%), abdominal pain (39%) and dysuria (34.8%) being the most frequent.

Conclusions: Although *Aerococcus*-associated urinary tract infections are usually mild, there is a risk of dissemination and complications such as bacteraemia and endocarditis. The risk factors most frequently associated with this pathogen are age and urological disorders.

Keywords: *Aerococcus, urinary, infection*

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[Abstract:0099]

MENINGOCOCCEMIA: A RARE PRESENTATION AND TIMELY INTERVENTION

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A 22-year-old female arrived at the emergency department with a concerning medical history spanning two days, marked by an intense headache and a fever exceeding 38ºC. Upon conducting a physical examination, the healthcare team noted several alarming symptoms including meningism, somnolence, and the rapid development of petechiae skin lesions (Figure 1, 2, and 3, indicated by arrows). Further laboratory investigations revealed a new onset of anaemia, reduced platelet counts, and an elevation in acute phase reactants. Due to the suspicion of meningococcal meningitis, a lumbar puncture was promptly conducted.

Gram-negative diplococci forms were detected (Figure 4, marked by arrows) in the cerebrospinal fluid and in the blood cultures during the Gram stain examination, and a real-time polymerase chain reaction confirmed the presence of *Neisseria meningitidis*.

The patient received a three-week regimen of cephalosporins, leading to a remarkable recovery with the disappearance of the skin lesions. The swift identification of these clinical patterns allowed for precise and early administration of antibiotics even before the lumbar puncture was performed. During a follow-up appointment three months after the initial presentation, the patient was reported to be in good health.

This case underscores the critical importance of recognizing and promptly addressing the unusual clinical manifestations of meningococcal meningitis. Early diagnosis and treatment are essential in preventing severe complications and ensuring a positive outcome for patients afflicted with this potentially life-threatening condition.

Keywords: *meningococcemia, Neisseria Meningitis, petechiae skin lesions*

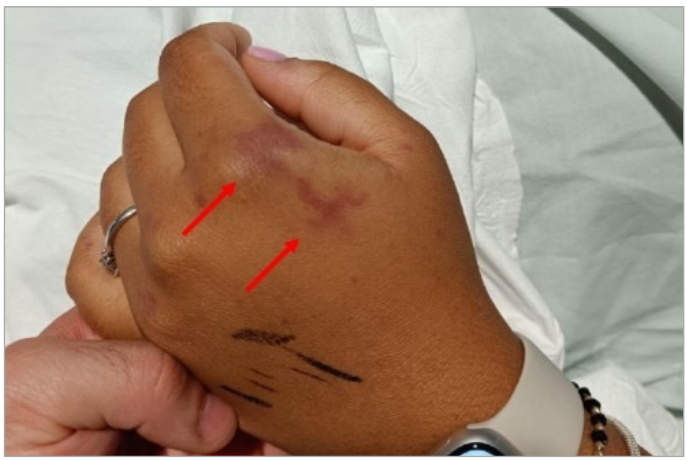

Figure 1.

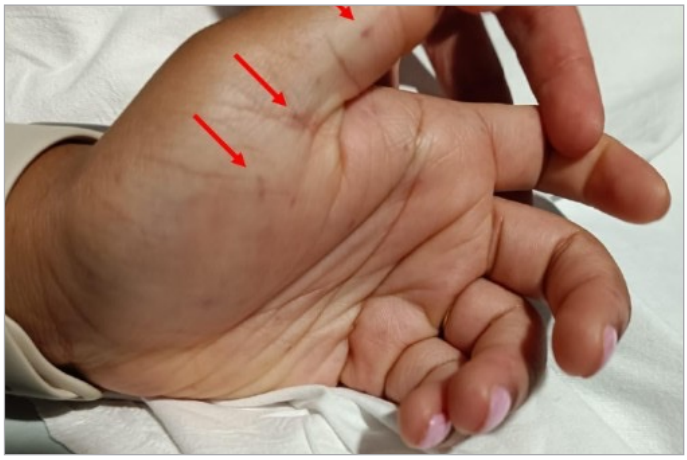

Figure 2.

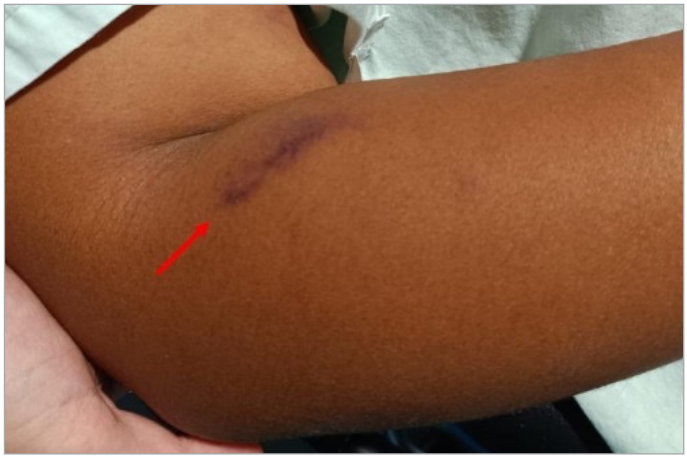

Figure 3.

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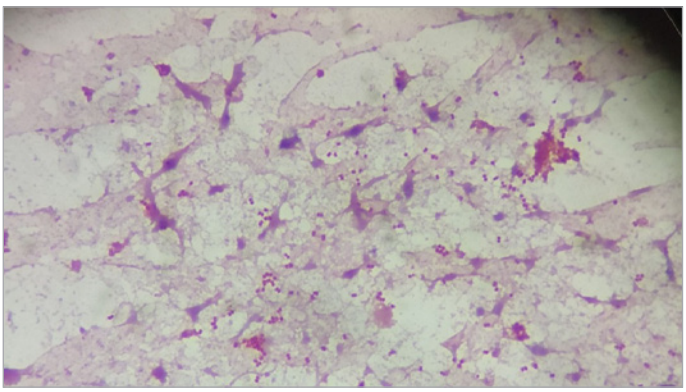

Figure 4.

[Abstract:0107]

A GREAT MIMICKER: TUBERCULOUS PERITONITIS IN A YOUNG ADULT

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Case Description: A 32-year-old female with an unremarkable medical history was admitted to the clinic due to fever, loss of weight, and diarrhoea for five months. Physical examination revealed moderated ascites with pericardial and bilateral pleural effusion. Laboratory investigation showed neutrophilic leukocytosis, increased CRP (113 mg/L), and ESR (82). Diagnostic paracentesis and thoracocentesis revealed serum–ascites albumin gradient inferior to 1.1 with a protein level higher than 2.5 g/dL (5.36 g/dL). Fluid characteristics had a high lymphocyte ratio of 70%. Adenosine deaminase activity (ADA) was remarkable at 53 U/L.

Clinical Hypothesis: Given the constitutional symptoms, malignancy and tuberculosis were considered differential diagnoses. Tuberculosis was thought mainly based on the increased pleural ADA.

Diagnostic Pathways: FDG PET-CT documented increased activity (SUDmax: 6.2) in peritoneal and mesenteric nodular infiltration with pathological multiple lymph nodes. (Figure 1) The tuberculosis skin test was positive. Gynaecological examination, smear test, and pathological examination of the ascites were negative for malignancy. Lower endoscopy revealed nodular, ulcerated lesions in the terminal ileum and descending colon. Biopsy of the terminal ileum and omentum demonstrated non-necrotizing granuloma with neutrophilic infiltration. These findings were consistent with the diagnosis of tuberculosis.

Discussion and Learning Points: Peritoneal tuberculosis amounts to 2% of all the extrapulmonary forms. This case emphasizes the need to consider tuberculosis as a differential diagnosis in young patients with constitutional symptoms, even if they have no respiratory complaints. Peritoneal tuberculosis can mimic diverse clinical conditions, including epithelial ovarian or peritoneal cancers. Therefore, misdiagnosis and treatment delays are common problems.

Keywords: *tuberculous peritonitis, serositis, fever of unknown origin*

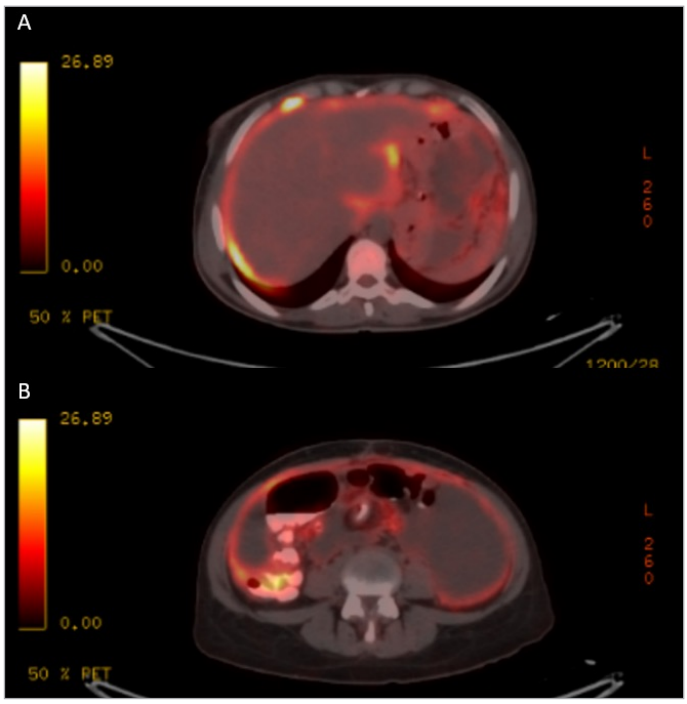

Figure 1.

[Abstract:0116]

A RARE CAUSE OF FOURNIER'S GANGRENE: SGLT-2 INHIBITORS, A CASE REPORT

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Introduction: Fournier's gangrene is a rarely seen necrotizing fasciitis affecting the perineal, perianal or genital areas. Risk factors are diabetes, use of SGLT-2 inhibitors, HIV, alcoholism and immunosuppression. The disease is characterized by oedema, fever, crepitus and even sepsis. Emergency surgical debridement and broad-spectrum antibiotics are the main choices of therapy. Fournier gangrene is a urological emergency with a high mortality rate, requiring early diagnosis and surgical intervention.

Case Presentation: A 66-year-old male patient was admitted to hospital with confusion and fever. The patient had diagnoses of diabetes, lung carcinoid tumour and past tuberculosis. The patient had been using SGLT-2 inhibitors as a treatment of diabetes. The patient with swelling, wound and purulent discharge in the scrotum was diagnosed with septic shock due to Fournier's gangrene, piperacillin-tazobactam and teicoplanin treatment were started. However, bilateral scrotal oedema increased and scrotal walls were diffuse thick and oedematous in ultrasound. Debridement and left orchiectomy were performed. *Acinetobacter* was detected in tissue culture taken during surgery. Tigecycline

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treatment started. Insulin treatment was initiated and blood sugar was regulated. *Acinetobacter baumanii* was detected in recurrent tissue cultures and tigecycline treatment was continued for 30 days. When WBC, CRP decreased, treatment was ended, and the patient was discharged.

Discussion: Fournier gangrene is a urological emergency with high mortality rates and requiring early intervention. In this case, early diagnosis and early intervention are the most important factors in the patient's complete healing, with rapid debridement until it reaches the solid tissue border. Another important point in the treatment of Fournier's gangrene is the daily debridement dressings, nutritional support and blood sugar regulation. It should be remembered that the infection will progress rapidly due to comorbidities accompanying the geriatric patient.

Keywords: *Fournier gangrene, SGLT-inhibitors, diabetes mellitus*

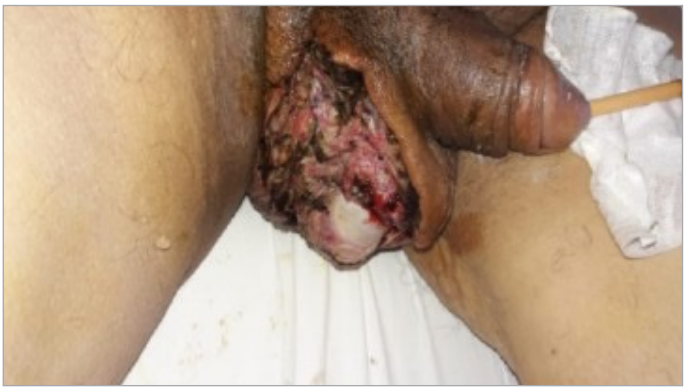

Figure 1. *Fournier's Gangrene.*

[Abstract:0118]

ROLE OF SERUM FERRITIN AS AN EARLY PREDICTOR OF DENGUE INFECTION PROGRESSING TO CRITICAL ILLNESS

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Background: Early predictors of severe dengue are important for early identification and management of critical illness. We aimed to identify the role of serum ferritin as an early predictor of severe dengue.

Methods: An observational study was conducted using all patients with confirmed dengue infection admitted to three private-sector hospitals in Gampaha district from March 2022 to June 2023. Data on symptoms, signs, and investigations were collected prospectively by pre-intern medical graduates. Patients entering the critical phase and hence dengue haemorrhagic fever (DHF) were defined based on evidence of fluid leakage. Associations of serum ferritin levels collected on day 3 and 4 of illness to the development of DHF was assessed using logistic regression and its prediction to severe illness was determined using receiver operating characteristic (ROC) curves.

Results: A total of 166 patients; adults 113 (male 56.6%, mean age 37.6 SD16.14 years), children 53 (male 53.8%, mean age 6.5 SD3.51 years) were studied. Adults 42 (37.2%) and children 6 (11.3%) progressed to DHF. Rising serum ferritin on day-3 (p=0.019) and day-4 (p=0.034) were significantly associated with DHF in both adults and children. Rising alanine aminotransferase (ALT) above baseline on day-3 (p=0.024) or day-4 (p=0.019) was significantly associated with DHF in adults. Serum ferritin >450 ng/mL on day-3 (sensitivity 0.74; Specificity 0.77) or >500 ng/mL on day-4 (Sensitivity 0.84; Specificity 0.53) were predictive of dengue infection progressing to DHF.

Conclusions: Serum ferritin on days 3 or 4 appears to be a reliable predictor of dengue infection progressing to DHF.

Keywords: *Dengue infection, Dengue haemorrhagic fever, serum ferritin*

[Abstract:0140]

ISAVUCONAZOL THERAPEUTIC MONITORING

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Objectives: The therapeutic drug monitoring (TDM) of isavuconazole as a second therapeutic step after the withdrawal of voriconazole for the treatment of pulmonary aspergillosis is progressively beginning to take part in our clinical practice in the follow-up of this pathology.

Methods: Descriptive analysis of the hospitalization and consultations reports of those patients diagnosed of aspergillosis with pulmonary involvement treated with isavuconazole from 01/01/2018 to 09/01/2023. We assessed the absence of previous prophylaxis, immunological status, COVID-19 infection and ICU admission, duration of treatment and previous use of voriconazole as well as the reasons for its suspension, with subsequent TDM and dose readjustment (if required).

Results: We found 14 patients being treated with isavuconazole with a mean age of 68 years. Only one of them took it as primary treatment. If we look at the comorbidities, 50% had hypertension,

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21% diabetes, 57% dyslipidaemia, 14% chronic obstructive pulmonary disease and 43% chronic kidney disease. Among the patients who received voriconazole previously, said drug was withdrawn due to supratherapeutic levels (7.1%), infratherapeutic levels (21.3%), visual alterations (21.3%), therapeutic inefficiency (14.3%) and hepatotoxicity (28.5%). TDM was carried out after a loading dose in the 35.7% of all of them with dose adjustment required in the 28.6%.

Discussion: Monitoring of isavuconazole levels is currently off label. Initial studies on TDM are being conducted, so it is early to jump to conclusions.

Conclusions: Further adjustment of the drug may be necessary to improve its efficacy and effectiveness in the treatment of pulmonary aspergillosis.

Keywords: *aspergillosis, levels, isavuconazole*

TDM

		Frequency	Percent	Valid percent	Cumulative percentage
Valid	no	9	64,3	64,3	64,3
	yes	5	35,7	35,7	100,0
	Total	14	100,0	100,0	

Dose adjustment

		Frequency	Percent	Valid percent	Cumulative percent
Valid	no	10	71,4	71,4	71,4
	yes	4	28,6	28,6	100,0
	Total	14	100,0	100,0	

Table 1. *Frequency table.*

[Abstract:0147]

PNEUMONIA IN NON-HIV IMMUNOSUPPRESSED PATIENT

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Case Presentation: 63-year-old woman with no known allergies and without toxic habits. She suffers from rheumatoid arthritis diagnosed in 2016 with several failed treatments (methotrexate), currently being treated with Etanercept a weekly injection and Prednisone in flares. In the context of respiratory infectious exacerbation, there was a first episode of right spontaneous pneumothorax operated on in November 2022 with persistent leak and treated with the Thopaz system. She had insidious symptoms for 2 months, fever and dry cough, with a pulmonary infiltrate in the left hemithorax observed in X-ray subsidiary of antibiotic treatment (ceftirolene) and proposed discharge.

She consulted again after a few days due to dyspnoea, without fever and with visualization of worsening on X-ray, so she was admitted to hospital to complete the study and treatment. Analysis upon admission: leukocytosis 13240 (neutrophils 10740, lymphocytes 1620), rest normal. GA: pH 7.49, Sat O_2 95.9%, pCO_2 37 mmHg, pO_2 72 mmHg, HCO_3 28.2 mmol/l. Cytomegalovirus positive.

Evolution: Febrile patient, with elevated RFA, CPR (79) and Procalcitonin (0.44) and decrease in leukocytes (14-11000). Dyspnoea on minimal effort presenting hypoxemic respiratory insufficiency with high alveolar-arterial gradient. Worsening pulmonary infiltrate.

Auscultation: fine teleinspiratory crackles more pronounced in the base and middle right field. Fairer Sat O2 fluctuating between 89-92% with NG at 3 lpm. No tachypnea or drawing.

Treatment: glucocorticoids rate was increased and antibiotic was escalated to piperaciclin-tazobactan and empirical treatment with trimetropine-sulfamethoxazole is initiated to avoid Pneumocystis (which was positive on BAL).

Discharge was given after 35 days with success.

Keywords: *pneumonia, immunocompromised, management*

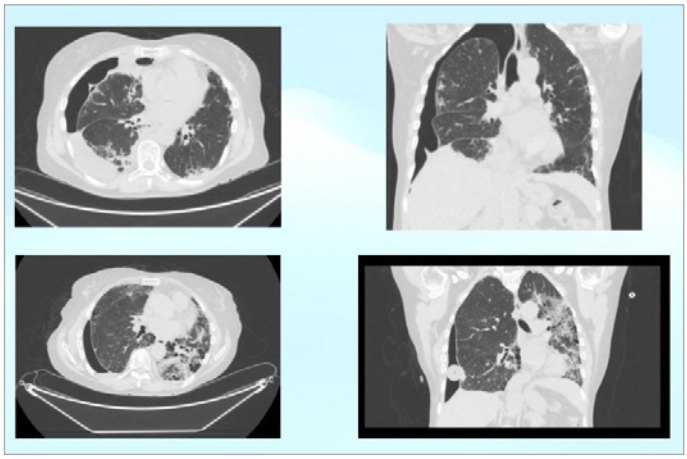

Figure 1. *Comparing images. After and before treatment.*

[Abstract:0156]

GIANT CELL ARTERITIS ASSOCIATED WITH ACUTE Q FEVER - A CASE REPORT

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Q fever is a worldwide spread zoonotic disease caused by the Gram-negative intracellular bacillus *Coxiella burnetii*. Apart from its most common manifestations Q fever has been reported to occasionally mimic autoimmune diseases.

We herein present a case of acute Q fever in a 69-year-old man

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manifesting as prolonged fever with pneumonitis in whom biopsy of the temporal artery revealed giant cell arteritis.
Despite antibiotic treatment the patient continued to be febrile, so a workup for fever of unknown origin was started. Serology for Coxiella burnetii, however with an immunofluorescent assay was positive for acute infection. At the same time we received the results of the temporal artery biopsy which demonstrated histological findings consistent with giant cell arteritis.
With the suspicion of focalized *Coxiella burnetii* vascular infection, we sent the paraffin cube of the temporal artery biopsy specimen for PCR testing for *C. burnetii*, which turned out positive. We further performed a whole- body PET/CT scan to investigate for large vessel vasculitis, which turned out negative. To decrease the risk of progression to chronic infection because a vascular infection was already established, we choose to treat the patient as a persistent *C. burnetii* infection, taking 200 mg of doxycycline and 600 mg of hydroxychloroquine daily for 18 months. The patient had close clinical and serological follow up and very soon he remained symptoms free while the inflammatory markers and the haemoglobin concentration returned to normal.
More than six months now have passed without recurrence.

Keywords: *Q fever, Coxiella burnetii, giant cell arteritis, temporal arteritis*

	Phase I	Phase I	Phase II	Phase II
Date	IgG	IgM	IgG	IgM
09/09/21	1/64	negative	1/512	1/24
24/09/21	1/128	negative	1/1024	1/24
10/01/22	1/512	negative	1/2048	1/24

Table 1. *Coxiella burnetii antibodies.*

[Abstract:0166]

FROM "SEA-BLUE HISTIOCYTES" IN THE BONE MARROW TO TUBERCULOSIS: A CLINICOPATHOLOGICAL CORRELATION

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Aim: A 22-year-old woman with an appendectomy history admitted with chronic fatigue, fever and unintentional weight loss. Bone marrow examination revealed "sea-blue histiocytes" that required further investigation of the diseases related to this finding. A paraaortic lymph node sampling, which led us to tuberculosis, was done. This workup, up to our knowledge, shows a new disease that is related to the bone marrow finding of "sea-blue histiocytes".
Methods: In search of the possible causes of unintentional weight loss and recurrent fever, infectious and malign diseases were gone over with biochemical tests, radiological and pathological methods.
Findings: High erythrocyte sedimentation rate and beta-2 microglobulin in the first admission. Computed tomography and magnetic resonance imaging demonstrated contrast enhancement in the pelvic peritoneum and minimal splenomegaly both of which were thought to indicate abdominal tuberculosis. Serum QuantiFERON-TB test was positive while the PPD test was negative. In the bone marrow examination, there was negativity in the Ziehl-Neelsen staining but "Sea-blue histiocytes". Plasma Coxiella, Brucella, sexually transmitted disease panel, Hepatitis-HIV serology, direct-indirect Coombs, common rheumatologic markers, glucosylceramidase enzyme activity were all normal. A paraaortic lymph node sampling was done; it showed granulomas with caseous necrosis and basils stained with Ziehl-Neelsen.
Results: After diverse diagnostic methods with a focus on pathological conditions that could be related to the "sea-blue histiocyte" finding, since there was a clinical accordance, an additional pathological examination led us to the diagnosis of tuberculosis. Although we know a lot about tuberculosis today, there can still be new areas to discover.

Keywords: *sea-blue, histiocyte, tuberculosis*

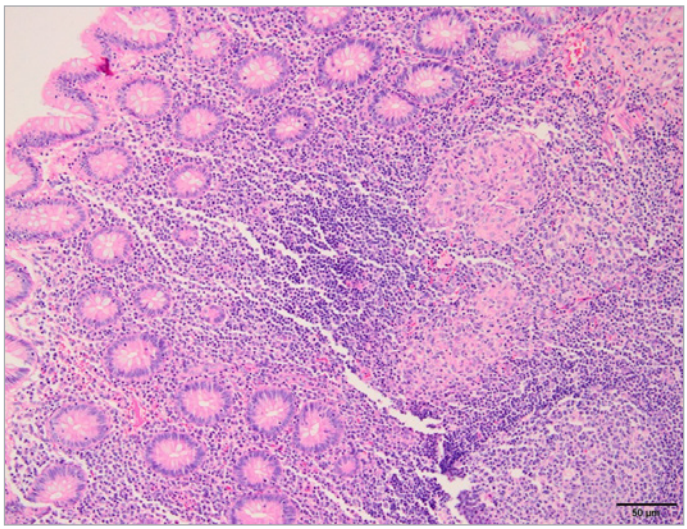

Figure 1. *Granulomas in the inguinal lymph node.*
Atypical histiocytic proliferation and granulomatous reaction was seen. In immunohistochemical study, EBER in situ hybridization was negative and there was nonspecific staining with LMP1.

 DOI: 10.12890/2024_V11Sup1

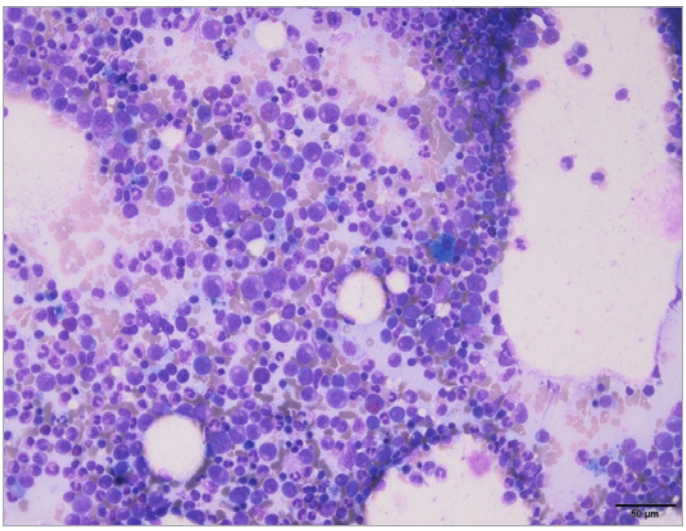

Figure 2. *Sea-blue histiocytes in the bone marrow.*
Bone marrow was examined with haematoxylin-eosin and reticulin stains. It was seen as a normocellular pattern with increased megakaryocytes. According to the immunohistochemical workup, vascular structures were dyed <5% with CD34. There was shown 5% of cells stained with CD20 and a relatively increased 10-15% with CD3 inside the marrow space. There was non-specific perinuclear punctate staining with LMP1. There were no basils with Ziehl-Neelsen stain. Bone marrow aspiration was examined with May Grunwald-Giemsa and iron stains. It was seen a normocellular pattern with a blast of <5%, subtle increase in myeloid over erythroid series, increase in plasma cells and "sea-blue histiocytes". There was enough iron storage without pathological sideroblasts. Bone marrow smear was poor in terms of any pathological evidence helping to diagnose.

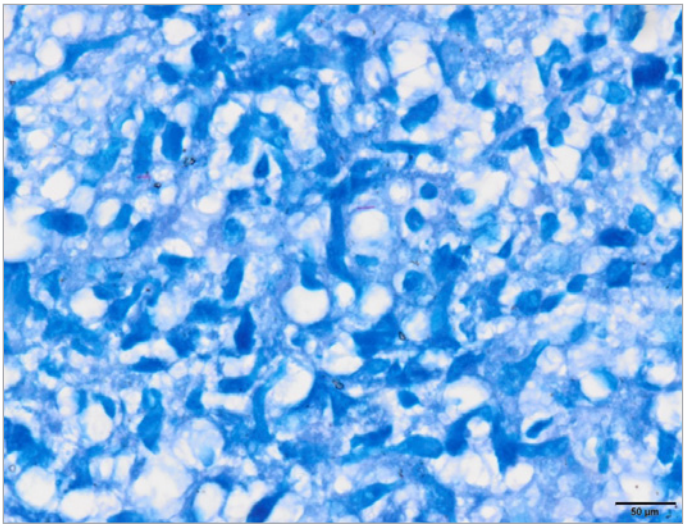

Figure 3. *Mycobacterium basil in the paraaortic lymph node.*
Wide necrotic areas of caseous type and granulomatous reaction were seen. Ziehl-Neelsen staining was positive with rare basils. Periodic Acid Schiff (PAS) and Gomori-Grokott Methenamine Silver (GMS) staining were negative.

[Abstract:0189]

EFFECTS OF EXTENDED INFUSION OF BETA-LACTAMS: A SYSTEMATIC REVIEW

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Objectives: To assess the frequency and severity of adverse effects in patients treated with beta-lactams using extended infusion compared to conventional short infusion regimens.
Materials and Methods: Systematic review in Embase, Cochrane, Medline, and ClinicalTrials.gov. Studies involved patients over 18 years comparing extended and continuous infusion schedules (3-6 hours and 24-hour infusion, regardless of dose) to conventional schedules (infusion in 20-30 minutes, regardless of dose) and reported adverse effects. The RoB-2 and Robins-I-Tool tools for bias assessment and GRADE scale to determine the quality of evidence. A narrative synthesis was chosen.
Results: Of the 1503 results, selecting a total of 15 studies. Significant biases and evidence quality ranging from moderate to very low. Eight studies were clinical trials, all randomized, but only one was double-blind. Six were single-blind and one was not blinded. Seven were observational studies, all retrospective. The average age ranged from 44-69 years with a slight male predominance. Sample size varied greatly with a significant heterogeneity of reported adverse effects, ranging from 0 to 64%. No statistical significance was reached. Only four were specifically designed to assess adverse effects. The rest did not predefine adverse effects, and in 7 it was not indicated in the protocol that data collection would be undertaken. Antibiotic doses were determined by study protocol or by the treating physician, with significant variability. The addition of concomitant antibiotics was allowed. Adverse effects in photo.
Conclusions: It is necessary to improve study protocols to adequately identify adverse effects and conduct specific trials based on the findings.

Keywords: *beta-lactams, extended infusion, adverse effects*

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Column1	Continuous Infusion	Boluses	Not specified
Diarrhea	28	39	
Nausea	8	10	
Abdominal pain	3	5	
Rash	4	1	
Vomiting	8	6	
Seizures	1	1	
Headache, confusion, altered level of consciousness	13	17	
Phlebitis	3	3	
ARF (Acute Renal Failure)	214	354	
C. Difficile	0	2	
Hypokalemia	2	6	
Hypernatremia	12	13	
Increased GGT	4	6	
Increased AST	4	3	
Increased ALT	3	3	
Thrombocytosis	1	3	
Not reported	91	89	161
Total number of patients	1189	1006	

Table 1. *The total reported adverse effects.*

[Abstract:0207]

SEPSIS UNMET NEEDS, ANY ROLE FOR CELLULAR THERAPY? MESENCHYMAL STEM CELLS IN SEPSIS, META-ANALYSIS

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Sepsis is a leading cause of death in hospitalised patients. Due to strong immune-modulatory properties of mesenchymal stem cells (MSCs), several trials experimented MSCs in patients with severe sepsis.

Methods and Results: Starting from 2010, seven clinical trials were included with total of 276 patients, 114 received MSCs and 162 as control. There is almost universal agreement about feasibility and safety of MSCs administration. There was significant survival advantage in the MSCs cohort, mortality odds ratio (OR) was 0.5, 95% CI 0.28 - 0.9 and P= 0.021.

Survival advantage was associated with the dose of $1x10^6$ cell/kg, OR =0.31, 95% CI 0.14 – 0.68 and P=0.004, while the cohort that received higher doses had OR 1.01, 95% CI 0.45 – 2.22 and P=0.9, The survival advantage was associated with frequent infusions, OR = 0.3, 95% CI 0.1 – 0.87 and P= 0.027. While survival in the cohort that received infrequent MSCs infusions was comparable with the control, OR was 0.62, 95% CI 0.31 - 1.22 and P=0.17

The MSCs positive effect extended to length of ICU and hospital stay, which could be taken as a surrogate for clinical improvement. Length of hospitalisation in the MSCs cohort was significantly shorter. The standardised difference in means (d) was -0.443, 95% CI -0.743 to -0.144 and P = 0.004. Also, MSCs therapy was associated with significantly shorter ICU stay, d= -0.349, 95% CI -0.647 to -0.051, Z-value is -2.298 and P = 0.022, Q-value is 3.317 with df= 4.

Keywords: *mesenchymal stem cells, sepsis, septic shock, cellular therapy*

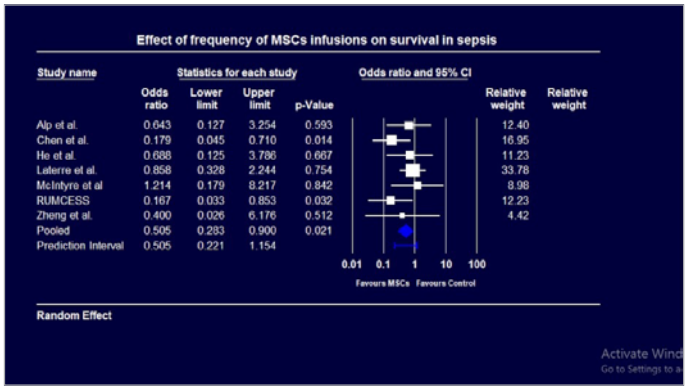

Figure 1. *Survival post Mesenchymal Stem Cells in sever sepsis. MSCs therapy is associated with significantly higher survival in sever sepsis. The analysis is based on seven studies. The effect size index is the odds ratio (OR) and random-effects model was employed for the analysis. OR=0.505, 95% CI 0.283 to 0.90, p = 0.021and PI is 0.221-1.154. Q= 6.157 with df= 6 and I-square = 3%. Tau-squared is 0.016 in log units and Tau, is 0.128 in log units. MScs: Mesenchymal stem cells PI: prediction interval.*

Study name	Phase	No. of infusions	Dose	Tissue source
Alp et al. 2022	I CT	5i	1 × 10^6 cell/kg	AD
Chen et al. 2020	I CT	3ii	1 × 10^6 cell/kg	MB
He et al. 2018	I CT	1	1 × 10^6 cell/kg	UC
SEPCELL trial 2023	Ib/IIa CT	2	1.6 × 108 cell/infusion	AD
CISS trial 2018	I	1iii	0.3, 1, 3 x 10^6 cell/kg	BM
RUMCESS 2018	I/II	1	1 × 10^6 cell/kg	BM
Zheng et al. 2014	I RCT	1	1 × 10^6 cell/kg	AD

Table 1. *Characteristics of Trials Experimenting Mesenchymal Stem Cells in sepsis.*
RCT: randomised controlled trials, CT: controlled trials, UC: umbilical cord, BM: bone marrow, AD: Adipose tissue, MB: menstrual blood. All trials included allogenic MSCs from healthy donors. i: Sequence of infusions: days 1,3,5,7,9. ii: Sequence of infusions: days 1,3,5. iii: 3 groups: 3 patients received 0.3x10^6 cell/kg, 3 received 1x10^6 cell/kg and 3 received 3x cell/kg.

[Abstract:0219]

A RARE CASE WITH TONSIL INVOLVEMENT OF TUBERCULOSIS

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Case Description: A 73-year-old female patient with heart valve disease, and hypertension was admitted to the hospital with a one year history of progressive dysphagia, causing deficiency

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in oral intake and weight loss. There were no complaints of night sweats, fever or cough. She had tonsillar hypertrophy and cervical lymphadenopathy (LAP). The entire larynx and posterior pharyngeal wall were covered with white plaques.

Clinical Hypothesis: Infection (TB), malignancy (lymphoma) and connective tissue diseases.

Diagnostic Pathways: ANA (-), ANCA (-), ESR: 50 mm/hour, CRP: 123 mg/L, urine analysis: normal reactive LAPs were detected in axillary, inguinal and neck USG. Thorax CT revealed millimetric multinodular appearance in the bilateral parenchymal areas

Fine needle aspiration biopsy of tonsil revealed caseous granuloma. QuantiFERON test was positive and her sputum sample was positive for mycobacteria. Antituberculosis treatment was started for miliary tuberculosis with lymph node and tonsil involvement.

Discussion and Learning Points: Tuberculosis (TB) is an infectious disease caused by *Mycobacterium tuberculosis*, with more than 1.7 billion people estimated to be infected with it. Extrapulmonary involvement is seen in 10-15%, occurring mostly in immunosuppressed patients. Tonsillar involvement is very rare. It may be challenging to differentiate tonsillar TB from malignancy and other granulomatous diseases. Typical findings for tonsillar TB are caseous granulomas in biopsy and positive acid-fast stain. Although it is generally seen with pulmonary TB, there are cases reported with isolated tonsillar involvement.

Keywords: *tuberculosis, rare case, tonsil involvement*

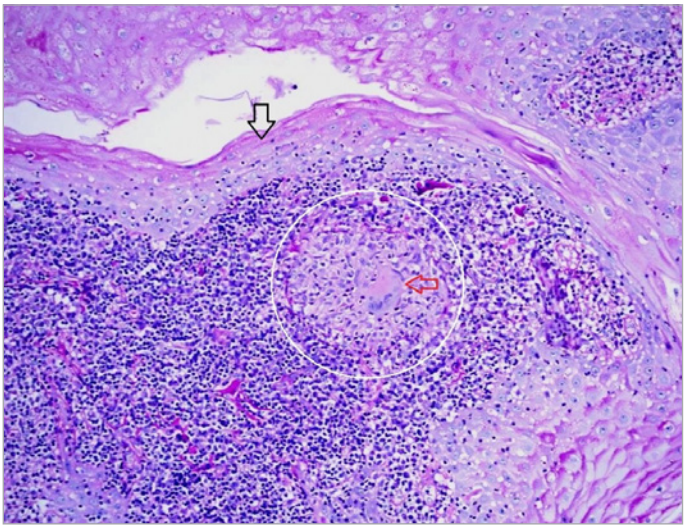

Figure 1. *In the microscopic examination of the tonsil biopsy, a round-shaped granuloma structure consisting of epithelioid histiocytes and Langhans-type giant cells (red arrow) is observed under the nonkeratinized squamous epithelium (black arrow) on the surface. A chronic inflammatory response consisting of lymphocytes and plasma cells surrounds the granuloma.*

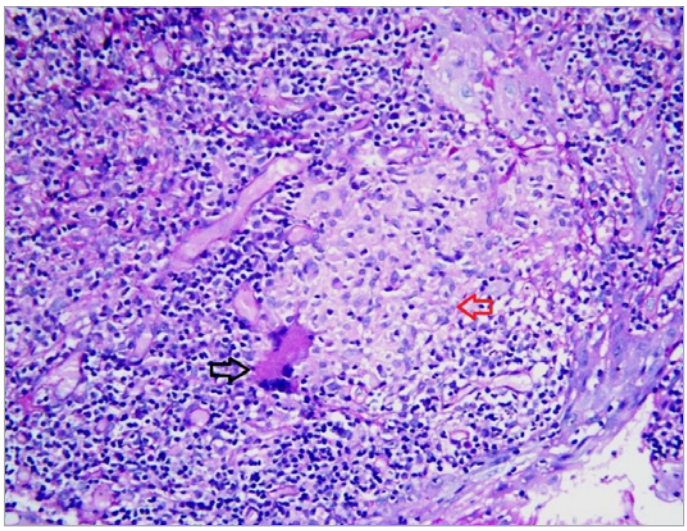

Figure 2. *Epithelioid histiocytes that form the granuloma are differentiated histiocytes with large cytoplasm, open chromatin, and polygonal shape (red arrow). The effort of epithelioid histiocytes to combine and increase their phagocytic activity forms Langhans-type multinucleated giant cells (black arrow).*

[Abstract:0230]

FEVER OF ATYPICAL ORIGIN IN A PATIENT WITH KIDNEY TRANSPLANT

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56-year-old patient with history of advanced chronic kidney disease secondary to cortical necrosis due to meningococcal sepsis, recipient of a third kidney transplant since 2016 with advanced graft dysfunction, presenting baseline creatinine around 4 mg/dL. Admitted due to several days fever with associated pancytopenia and worsening kidney function. Blood cultures, urine cultures, and exudate for respiratory viruses were obtained, and empirical antibiotic therapy with meropenem was started while awaiting results. During admission, he presented clinical impairment, with persistent fever despite antibiotic treatment, so it was decided to widen coverage with daptomycin and anidulafungin.

A body CT-scan was performed, which revealed 18.5 cm splenomegaly and small lymphadenopathy in the upper abdomen. All cultures obtained in the emergency room were sterile. Serology for Leishmania was done, which was positive at a titer of 1/160, and a bone marrow study was carried out, where Leishmania amastigotes were visualized. Specific PCR for *Leishmania donovani/infantum* was also performed in both peripheral blood and bone marrow, being positive in both samples.

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Reviewing the patient's serological history, the recipient had a negative pre-transplant serology for Leishmania and the donor was also negative, reasonably ruling out donor-recipient transmission. Considering the diagnosis of visceral leishmaniasis in a kidney transplant patient, liposomal amphotericin B was started at a dose of 3 mg/kg/day for the first five days, with a subsequent regimen of 250 mg weekly, with very good tolerance, disappearance of fever and with negativisation of the PCR for Leishmania in peripheral blood.

Keywords: *kidney transplant, Leishmania, pancytopenia, fever*

[Abstract:0256]

GAS-PRODUCING INFECTION OF THE GASTRIC WALL: EMPHYSEMATOUS GASTRITIS UNRAVELED

Garazi Araña Monedero, Paula Balbín Caminero, Mikel Mañas Senderos, Brais Fernández Francisco, Julen Agirre Castillero, Iñigo De Serra Tejada, Leire Araña Monedero, Nahia Arostegui Uribe, Federico Moran Cuesta, Fernando Andres Elgueta Tapia

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Emphysematous gastritis is a rare and serious condition characterized by air-producing microorganisms invading the gastric wall, often seen in individuals with prior gastric mucosal injuries or immunosuppression. Diagnosis relies on clinical symptoms and radiological evidence of air within the gastric wall.
The case involved a 55-year-old woman with Down syndrome, severe cognitive impairment, and extensive ulcerative colitis treated with Ustekinumab. She presented with diffuse abdominal pain, mucus-containing diarrhoea, and vomiting. Laboratory tests indicated neutrophilia and elevated CRP. Abdomino-pelvic CT scan confirmed emphysematous gastritis, along with small pneumoperitoneum and air in portal branches. Broad-spectrum antibiotics were initiated, leading to favourable progress.
CT scans are crucial for diagnosis, revealing not only air in the gastric wall but also wall oedema, pneumoperitoneum, and air in portal branches. Commonly isolated pathogens include *Streptococcus pyogenes*, *Staphylococcus aureus*, and *Escherichia coli*. Treatment entails broad-spectrum antibiotics, gastric secretion inhibitors, fluid therapy, and parenteral nutrition. Surgery becomes necessary if conservative measures fail or complications arise. This case underscores the importance of considering emphysematous gastritis in immunocompromised patients with prior gastric injuries presenting with acute abdomen. The prognosis remains bleak, with a high mortality rate of 60-75%.

Bibliography:

1. Zamora Elson M, Labarta Monzón L, Escos Orta J, Cambra Fierro P, Vernal Monteverde V, Seron Arbeloa C. Emphysematous gastritis, effectiveness of early antibiotic treatment. Gastroenterol Hepatol [Internet]. 2016;39(6):393–5. Available at: http://dx.doi.org/10.1016/j.gastrohep.2015.05.008

2. Cappa G, Silva RR, Rello NL, Fadlala JMR. EMPHYSEMATOUS GASTRITIS AS AN UNCOMMON CAUSE OF ACUTE ABDOMEN [Internet].

Keywords: *immunosuppression, mortality, abdominal pain.*

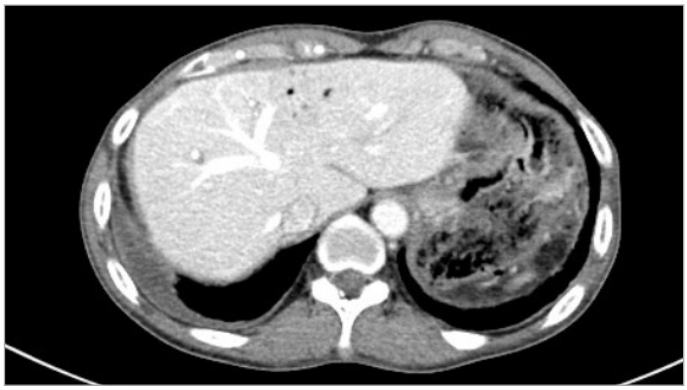

Figure 1. *CT Scan: emphysematous gastritis, along with small pneumoperitoneum and air in portal branches.*

[Abstract:0289]

TUBERCULOSIS-THE MASTER OF DISGUISE: A CASE OF DISSEMINATED TUBERCULOSIS MASQUERADING AS METASTATIC CANCER

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Purpose: Tuberculosis (TB) is an airborne infectious disease caused by *Mycobacterium tuberculosis* (MTB). Differentiating TB from neoplastic conditions poses significant challenges. In this report, we present a rare case of disseminated TB involving the nasopharynx, lung, pleura, peritoneum, and lymph nodes, who was initially evaluated with a diagnosis of metastatic carcinoma of the lung and nasopharynx.
Methods: The diagnosis of TB was confirmed through biopsies demonstrating granulomatous inflammation in the lung and nasopharynx, along with culturing MTB from pleural effusion.
Findings: A 33-year-old female patient was admitted to the emergency clinic with shortness of breath, cough, and abdominal pain. Postero-anterior chest X-ray revealed massive pleural effusion leading to mediastinal shift. With a preliminary diagnosis

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of malignant pleural effusion, a pleural catheter was inserted and the patient was referred for a positron emission tomography (PET/CT) to assess the primary site for a biopsy. The PET/CT revealed asymmetric soft tissue thickening on the left side of the nasopharynx, and increased fluorodeoxyglucose (FDG) uptake in the left cervical lymph nodes raised suspicion regarding primary nasopharyngeal cancer. Additionally, there was an increased FDG uptake observed in the mass lesion located in the right upper lobe, mediastinal lymph nodes, pleural surfaces in the left hemithorax, perihepatic areas, and peritoneum, indicating diffuse metastatic disease. The diagnosis of TB was confirmed through biopsies along with culturing MTB.

Conclusions: We present a rare case of disseminated TB masquerading as metastatic cancer. Despite its rarity, healthcare professionals should consider nasopharyngeal TB as a potential diagnosis when evaluating nasopharyngeal masses.

Keywords: *extrapulmonary tuberculosis, nasopharyngeal tuberculosis, nasopharyngeal carcinoma*

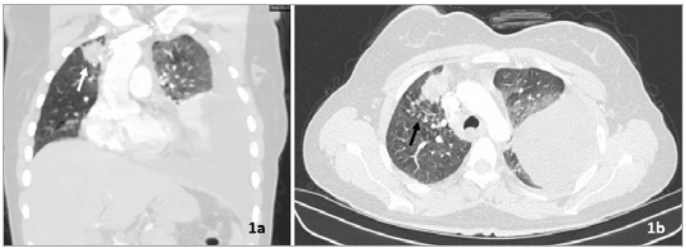

Figure 1. *Computed tomography of thorax demonstrating the presence of a loculated pleural effusion within the left hemithorax (1a) and a mass lesion (35x22 mm) (1a, white arrow) accompanied by centroacinar opacities (1b, black arrow) in the right upper lobe.*

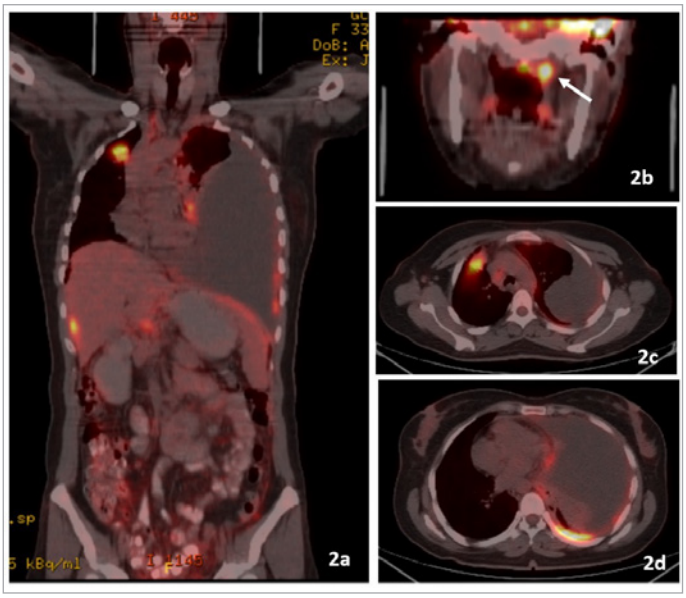

Figure 2. *The PET/CT demonstrating an increased FDG uptake in the mass lesion located in the right upper lobe (2a, 2c), pleural surfaces in the left hemithorax (2a, 2d), perihepatic areas, and peritoneum (2a), and asymmetric soft tissue thickening on the left side of the nasopharynx (2b).*

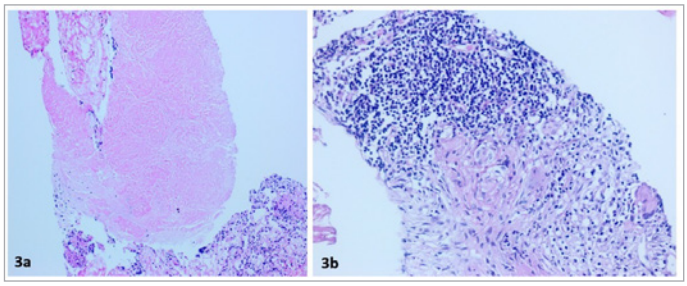

Figure 3. *Core needle biopsy of pulmonary mass lesion showing granulomatous inflammation with lymphocytes and multinucleated giant cell (Hematoxylin & Eosin, 200x) (3a) and necrosis (Hematoxylin & Eosin, 100x) (3b).*

[Abstract:0296]

TRANSIENT APLASTIC CRISIS DUE TO B19 PARVOVIRUS INFECTION IN A PATIENT WITH PERNICIOUS ANEMIA AND HEMOLYSIS

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Introduction: B19 Parvovirus is a human erythrovirus with cell tropism to bone marrow progenitors. Clinical presentation of infected patients is influenced by age and immune-haematological status. Patients with underlying haematological disorders, like pernicious anaemia, infection with this virus can lead to transient aplastic crisis, leading to episodes of severe anaemia.

Clinical Case: 68-year-old man, with Type 2 Diabetes Mellitus, chronic gastritis and anaemia under study in an Internal Medicine consultation, medicated with esomeprazole, metformin and oral iron.

Went to the Emergency Department due to worsening fatigue, anorexia and unquantified weight loss. Denied fever, night sweating, pain complaints or visible blood loss. Objective examination: hemodynamically stable, pale skin and discoloured mucous membranes. Analytically: pancytopenia, severe B12 vitamin deficiency, direct hyperbilirubinemia, haptoglobin <8 mg/dl, sedimentation rate of 50 mm and peripheral blood smear with marked anisocytosis with dysmorphism, predominantly macrocytic and hyper segmented neutrophils. Presented recent endoscopic study with signs of chronic gastritis and abdominal ultrasound without hepatosplenomegaly. Started supplementation with intramuscular B12 vitamin, with an improvement in anaemia, with consultation-oriented discharge. The remaining pending study revealed Anti-Parietal Cell Antibodies and positive IgG and IgM B19 Parvovirus antibodies. In evolutionary analytical control, pancytopenia was resolved.

Discussion: The spectrum of B19 Parvovirus infection presentation is quite broad and may be associated with serious complications in patients with underlying haematological pathology. Suspicion of infection by this virus in these patients is essential as they may avoid invasive procedures, such as bone marrow biopsy, since in

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this context the aplasia is transient and requires only supportive measures.

Keywords: *B19 Parvovirus, aplastic crisis, pernicious anaemia, haemolysis*

[Abstract:0305]

ACTIVE INTESTINAL TUBERCULOSIS WITH ESOPHAGEAL CANDIDIASIS IN A YOUNG WOMEN

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Case Description: A 19-year-old female admitted to hospital with upper left abdominal pain. She lost 15kg weight and occasional night sweats and fever of 39°C for the last three months. Past medical history was not notable other than iron deficiency anaemia. The family history was negative. Physical examination was unremarkable except for dullness in Traube-area.

Clinical Hypothesis: Intestinal Tuberculosis

Diagnostic Pathways: Microcytic anaemia with HGB 9.8 g/L, saturation of transferrin 4% and C-reactive protein as 50 mg/L, liver function tests were in normal range. Blood cultures negative for bacterial growth. Thorax-Abdominal CT scan showed hepatomegaly (16 cm) and splenomegaly (16 cm). Gastroscopy revealed oesophageal candidiasis and biopsies confirmed the presence of yeasts and pseudo hyphae invading into mucosal cells. Colonoscopy showed an ulcerated nodular lesion in the terminal ileum. Tissue PCR for *M. tuberculosis* resulted negative. Suppurative and necrosing microscopic focus was observed within the granuloma in biopsy. Mantoux skin test revealed induration of 26 mm and resulted positive. Sputum and urine stains for mycobacteria were negative. Based on the biopsy taken during the colonoscopy a diagnosis of intestinal tuberculosis was made. A four-drug regimen (isoniazid, rifampicin, pyrazinamide, ethambutol) was started. Fluconazole was added for the treatment of oesophageal candidiasis. Patients b symptoms resolved on follow up.

Discussion and Learning Points: Abdominal tuberculosis is relatively uncommon. As gastrointestinal TBC is a paucibacillary disease, the sensitivity of standard methods for detecting *M. tuberculosis* in clinical specimens remains poor. Therefore, our case shows that intestinal tuberculosis should be kept in mind in the presence of b symptoms and abdominal signs.

Keywords: *tuberculosis, intestinal, candidiasis*

[Abstract:0307]

PROBABLE IATROGENIC TRICUSPID ENDOCARDITIS - A CASE REPORT

Brais Fernández Francisco, Julen Agirre Castillero, Iñigo De Serra Tejada, Garazi Araña Monedero, Paula Balbín Caminero, Nerea Fernández Francisco, Andoni Pinedo García, Raquel García Blanco, Elna De Ciurana Montiel, Alma Borrell Repolles, Irene Barroso Benayas, Enrique Albert López, Andoni Regueira Acosta, Alfonso Gutiérrez Macías

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This report describes a case of an 82-year-old male with a complex medical history, including arterial hypertension, type 2 diabetes mellitus, dyslipidaemia, hyperuricemia, heart failure, coronary artery disease, and a prostate cancer. He was admitted to the hospital due to heart failure decompensation, and he had a peripheral venous line and urinary catheter in place. Upon admission, blood and urine cultures showed methicillin-resistant *Staphylococcus aureus* (MRSA) infection along with acute renal failure. Rapidly progressing lung consolidations were observed, suggesting septic embolisms, and tricuspid endocarditis was suspected despite inconclusive echocardiograms and PET scans. Treatment was initiated with daptomycin but was later modified due to complications to linezolid and eventually vancomycin, which led to good clinical progress.

Tricuspid endocarditis is a severe bacterial infection of the tricuspid valve, often associated with drug use, intracardiac devices, and intravenous catheters. *S. aureus* is the common causative agent, and clinical symptoms include fever, shivering, weakness, poor appetite, and weight loss, with septic pulmonary embolisms occurring in many cases.

Diagnosis involves positive blood cultures and compatible echocardiographic imaging, with treatment primarily relying on intravenous antibiotics such as oxacillin, cloxacillin, vancomycin, or daptomycin for 4-6 weeks. Prognosis is generally favourable, with some poor prognostic factors including the size of vegetations, immunosuppression in HIV patients, and drug use history.

References:

- ESC 2015 guidelines on the management of infective endocarditis (2016). Revista Española de Cardiología, 69(1), 69.e1-69.e49. https://doi.org/10.1016/j.recesp.2015.11.015
- Wang, A., & Holland, T. L. (n. d.). Overview of management of infective endocarditis in adults.

Keywords: *endocarditis, tricuspid, iatrogenic, MRSA, methicillin-resistant Staphylococcus aureus*

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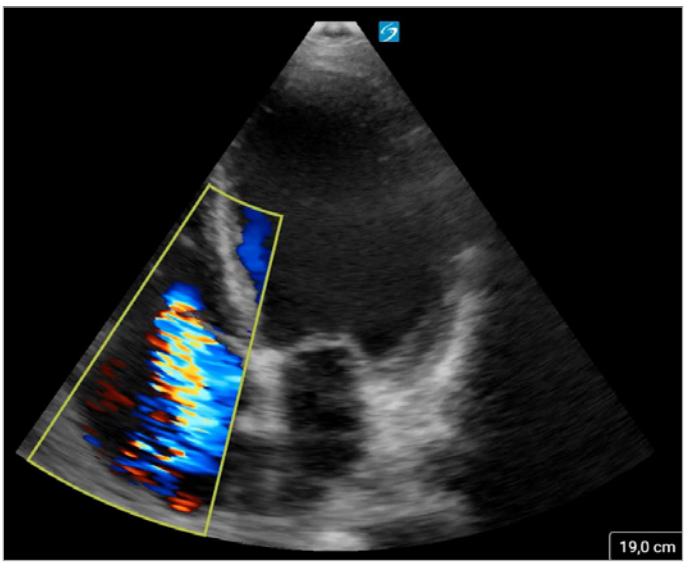

Figure 1. Point of care ultrasound. Aplical 4 chamber view. Severe tricuspid insufficiency.

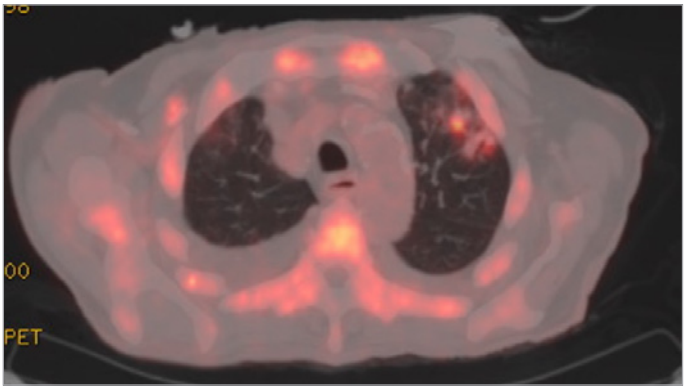

Figure 2. PET-TAC. Lung consolidations.

[Abstract:0326]

UNFITTING BITE

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We present a 38-year-old man with no known drug-related allergies or relevant personal history, who sought treatment for right elbow pain that lasted 3 weeks with limited fever up to 38°C. He presented an erythematous lesion (Figure 1) measuring 10 cm in diameter, suggesting an abscessed component. Additionally, two ulcerative punctate lesions were observed on the dorsal external region of the elbow, spaced more than 7-8 cm apart.

The patient reported the onset of symptoms after a fall in the Peruvian jungle during a tourist trip three weeks ago. When he fell into the trees, he thought he had been bitten by a snake, and it began to develop an infection in his right elbow, characterized by marked bruising and hemorrhage

Slowly feeling better, he returned to Spain for treatment in a travel medicine consultation. Examination with normal results ruled out snake bite, confirming abnormal separation between fractures. An interventional antibiotic regimen of amoxicillin/clavulanic acid was used, resulting in partial clinical-research improvement.

Recent studies showed increased hemorrhage and edema in the striated lesions. Hand pressing removed a 5 mm larva (Figure 2), microbiologically identified as *Dermatobia hominis*.

Once the diagnosis was confirmed, topical treatment with ivermectin and petroleum jelly was started, and a total of 3 larvae were successfully removed and complete resolution of the skin lesions was achieved This article emphasizes the importance of considering parasite infection in patients with a history of travel to endemic areas.

Keywords: *dermatobia hominis, parasitic infections, larva, ivermectine, Peruvian jungle*

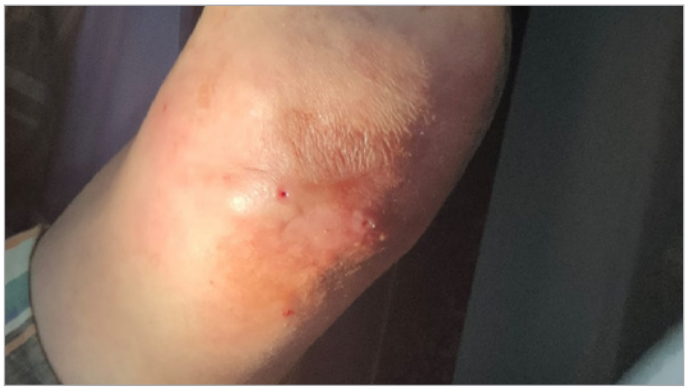

Figure 1. Skin and soft tissue infection involving a 10 cm diameter lesion on the elbow, with an abscessed component.

Figure 2. Larva of Dermatobia hominis, with small hooks in its body structure and an approximate size of 10-20mm.

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[Abstract:0344]

ARE THERE ANY DIFFERENCES IN MORTALITY BETWEEN PATIENTS DIAGNOSED WITH CANDIDEMIA WHO ARE FOLLOWED UP BY AN INFECTIOUS DISEASE CLINICIAN AND THOSE WHO ARE NOT?

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Purpose: To determine whether mortality in patients diagnosed with candidemia who have been followed up by an infectious disease clinician (IDC) is related to mortality in those patients who have not.

Methods: Retrospective observational study in which all patients diagnosed with candidemia in a tertiary referral hospital during the period between February 2018 and January 2023 are included. The variables collected were mortality and referral to the IDCs, which were analysed jointly applying the chi-square statistical test using the SPSS programme.

Findings: 3 out of the 162 patients sampled were lost in the system, so the final sample comprised 159 patients. Among these, 55 patients (34.6%) were referred to the IDC with a subsequent follow-up there, while 104 (65.4%) were not transferred to the IDC at all. Out of the total number of patients collected, 95 died, of which 72 were not followed up by the IDC as opposed to 23 who were (75.8% vs. 24.2% respectively, p= 0.001).

Conclusions: There is a statistically significant difference in mortality between patients diagnosed with candidemia who have been followed up by an infectious disease clinician and those who have not, with mortality being lower in patients who have been followed up, which is consistent with the published literature.

REFERENCES:

1. Cisneros J.M, Palomino-Nicás J, Pachón-Díaz J, La interconsulta de enfermedades infecciosas es una actividad clave para los servicios y unidades de enfermedades infecciosas y para el hospital: Elsevier [Internet] [Consulted 17 Nov 2023]. Available in www.elsevier.es/eimc

Keywords: *candidemia, follow-up, infectious, disease, clinician, mortality*

[Abstract:0362]

ARE ENOUGH HIV TESTS BEING DONE IN OUR OUTPATIENT CLINIC?

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Background: HIV prevalence in The Gambia is 1% according to WHO data for 2021. However only 55% of PLHIV are aware of the diagnosis, and only 33% are on ART. At the Clinical Services Department (CSD) of MRC Unit the Gambia at the LSHTM in Fajara, a small study was conducted to assess the efficacy of a HIV RDT buffer and showed a prevalence of 27.21% in the outpatient clinic (OPD) in 2022, consistent with a prevalence of 26% on a previous audit conducted in 2019. A higher prevalence among sick patients is expected compared to general population, however this big difference alerted us to the likelihood that we are not doing enough diagnostic tests.

Purpose: Assess if we are doing enough diagnostic tests for HIV at the CSD OPD.

Methods: Establish a list of indications for testing after reviewing literature. Review records for all the new patients seen in May 2023 at the OPD and establish if they needed a test or not. If they needed it, did they get it and what was the result.

Results: 426 patients records were reviewed. 26.29% (112) had an indication for testing. The main indications were weight loss, hepatitis B, pulmonary tuberculosis, other respiratory infections and skin infections. Among those who needed the test, only 43.75% (49) had it. The positivity rate for those who got the test was 18.37% (9). No patient refused the test.

Conclusions: We need to improve awareness of the indications for HIV testing at the OPD.

Keywords: *HIV, test, outpatient*

[Abstract:0387]

LEGIONNAIRES' DISEASE: A RARE CAUSE OF SECONDARY HEMOPHAGOCYTIC LYMPHOHISTIOCYTOSIS

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Summary: A 55-year-old male, previously on adalimumab for psoriasis, was admitted due to persistent fever and altered mental status. Further physical examination was negative, while laboratory results unveiled leukocytosis and elevated CRP. Lumbar puncture and brain imaging yielded negative results. Despite the administration of broad-spectrum antibiotics, the patient's condition continued to deteriorate. Legionellosis was definitively diagnosed through PCR on bronchoalveolar lavage;

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however, prescribed levofloxacin proved ineffective, resulting in a sustained febrile state.

Purpose: The differential diagnosis was broadened to include rare complications arising from bacterial infections, such as secondary Hemophagocytic Lymphohistiocytosis (sHLH). Laboratory investigations revealed telltale signs—hyperferritinemia, hypertriglyceridemia and hypofibrinogenemia -lending credence to the sHLH diagnosis.

Methods: The response to levofloxacin therapy proved suboptimal, with the patient persisting in fever, altered mental status, and elevated inflammatory markers. A thorough clinical and laboratory evaluation ruled out nosocomial infections. Subsequent analyses revealed hyperferritinemia, hypertriglyceridemia, hypofibrinogenemia, elevated LDH, and heightened IL-6 levels.

Findings: In concordance with the HLH modified criteria and the "Hscore '' system, sHLH was strongly indicated, even in the absence of cytopenias and bone marrow infiltration. Consequently, dexamethasone therapy was administered, heralding a favorable response.

Conclusions: sHLH presents as a rare and life-threatening syndrome, characterized by excessive inflammation and tissue damage, due to abnormal immune activation. The complexity and diverse clinical manifestations of this syndrome underscore the necessity of a high degree of suspicion, as early diagnosis is crucial. Within this diagnostic landscape, the "HScore" system and ferritin levels emerge as useful tools for the early recognition of this medical entity.

Keywords: *ferritin, Legionellosis, secondary hemophagocytic lymphohistiocytosis*

[Abstract:0389]

PERIPHERAL FACIAL PARALYSIS, DIAGNOSIS OF CUTANEOUS LOXOCELISM

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Case Description: 39-year-old female, rural area resident, who was referred to the Internal Medicine Day Hospital for peripheral facial paralysis and fever of 12 hours, in probable relation to palpebral and right hemiface oedema secondary to insect bite during the night.

Clinical Hypothesis: She was assessed at the Ophthalmology Outpatient Clinic, which ruled out ocular pathology. The physical examination revealed an entry point with a purplish necrotic eschar, as well as associated unilateral peripheral facial paralysis. Laboratory tests showed elevated acute phase reactants with a C-reactive protein of 218 mg/L and fibrinogen of 745 mg/dL, with no evidence of coagulopathy.

Diagnostic Pathways: In the differential diagnosis we included pyoderma gangrenosum, skin and soft tissue infection, vasculitis, arthropod bite and neutrophilic dermatosis. Intravenous systemic corticosteroid treatment was started with 125 mg methylprednisolone boluses for 3 days and antibiotic therapy with amoxicillin/clavulanic acid for 7 days. The patient evolved favourably with disappearance of peripheral facial paralysis in 5 days, progressive decrease of facial oedema and disappearance of necrotic eschar in 4 weeks.

Discussion and Learning Points: Loxosceles bite causes extensive necrosis with the formation of difficult-to-heal ulcers and deforming lesions that may require surgical debridement. It sometimes presents with systemic symptoms such as fever, headache, myalgia, impaired renal function and/or coagulopathy. Treatment consists of local cold, antihistamines, systemic corticosteroids, antibiotics, tetanus vaccine and analgesics.

Keywords: *arthropod vectors, facial paralysis, fever*

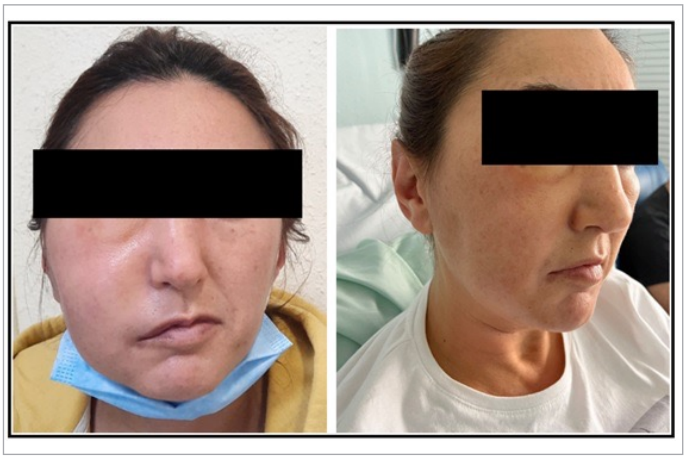

Figure 1. *Palpebral and right hemiface oedema and associated unilateral peripheral facial palsy.*

[Abstract:0392]

TROPICAL FEVER BY AN ATYPICAL RICKETTSIA

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Case Description: 47-year-old man, with history of metabolic syndrome, consulted for one week fever and asthenia. The symptoms were accompanied by generalised erythema, which disappeared on vitropressure. He had recently travelled to

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Mozambique and he also reports that during the trip was bitten twice by ticks that his partner pulled off. The patient had two lesions on the trunk and right external malleolus, both with a necrotic area ("black spot") and a raised, erythematous border (Figure 1 and 2).

Clinical Hypothesis: Rickettsial disease.

Diagnostic Pathways: Laboratory tests showed were normal. Finally, the culture of the eschar was positive for *Rickettsia africae*. The patient started treatment with doxycycline with improvement of symptoms.

Discussion and Learning Points: Fever is one of the most frequent causes of consultation after returning from a trip to a tropical country. It is important to ask the patient about the details of the trip to make a proper differential diagnosis. African tick-bite fever is the second most frequently identified cause for systemic febrile illness among travellers, following malaria. *Rickettsia africae* is usually transmitted by livestock and game ticks (*Amblyomma hebraeum* in southern Africa) in rural settings, unlike *Rickettsia conorii* transmitted by dogs mainly in peri-urban areas. Symptoms in the first 5-7 days are usually non-specific (fever, headache, myalgia, etc.) followed by a generalised maculopapular rash typically affecting palms and soles. *R. africae* tends to be a milder disease, distinguishing features are multiple eschars, regional lymphadenopathy and scattered and/or vesicular rash elements.

Keywords: *African tick bite fever, Rickettsia africae, Rickettsial disease*

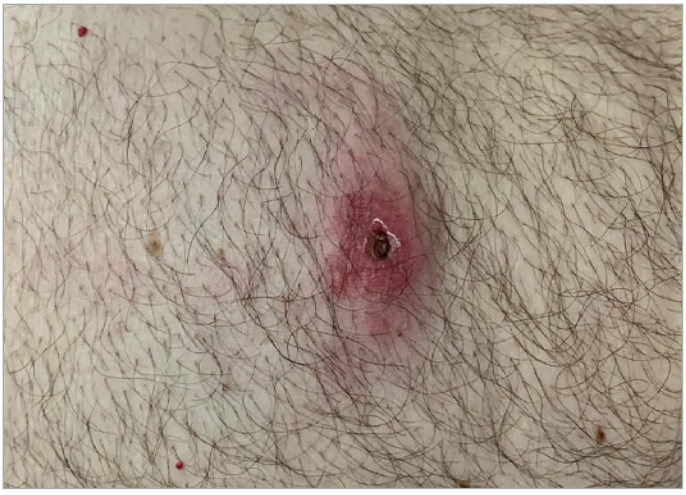

Figure 1.

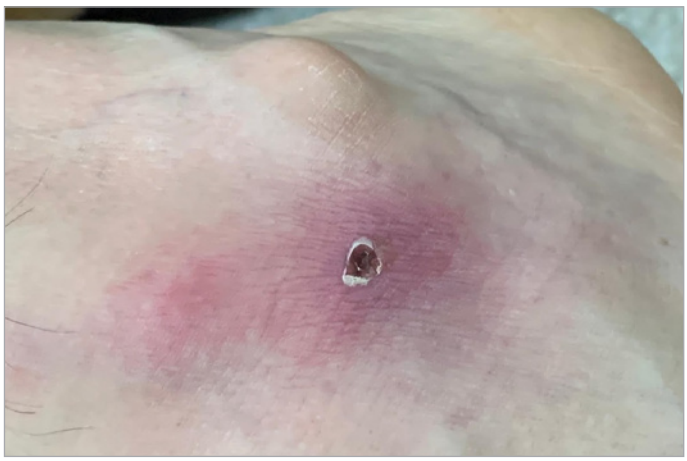

Figure 2.

[Abstract:0394]

FEVER AND PUBIC PAIN AFTER AN UROLOGICAL PROCEDURE: THINK OSTEOMYELITIS PUBIS

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Osteomyelitis pubis results from local or hematogenous bacterial dissemination to the symphysis. Due to its infrequency and variable presentation, it can be easily under-recognized. We report the case of an 81-year-old male who presented with an acute urinary obstruction, fever and worsening suprapubic pain radiating to both thighs preventing walking. A urinary catheter was placed. Antibiotics were given for a urinary tract infection and rhabdomyolysis was attributed to a fall. Worsening pain and a history of recent endoscopic urological procedure led to a pelvic MRI. It identified a vesico-symphysial fistula, symphyseal lysis and bilateral infectious myositis of the adductors. Urinalysis showed *E. faecalis* and *P. aeruginosa*. Prolonged antibiotics course and extended pelvic surgery resulted in a favourable outcome.

Discussion and Learning Points: -Osteomyelitis pubis is a rare but classical complication of urological or gynaecological procedures. Other risk factors are trauma, pelvic malignancy, intravenous drugs use, and sports, especially soccer(1).

-Early diagnosis requires pelvic MRI or CT-scan. Positive standard radiography is often delayed(2).

-Recommended antibiotic course is 6 weeks. Chronic osteomyelitis, persistent fistula or collection need surgical management(3).

1 Ross JJ et al. Septic Arthritis of the Pubic Symphysis: Review of 100 Cases. Medicine. 2003;82(5):340 5.

2 Tiemann AH et al. Putrid infectious pubic osteitis: case report and review of the literature on the differential diagnosis and treatment of infectious pubic osteitis and inflammatory pubic osteitis. Eur J Trauma Emerg Surg. 2010;36(5):481 7.

3 Almeras C et al. [Postoperative osteitis of the pubis: diagnosis, treatment and results]. Prog Urol. 2002;12(2):253 9.

DOI: 10.12890/2024_V11Sup1

Keywords: *infectious pubic osteitis,pubic osteomyelitis, vesico-pubic fistula complication*

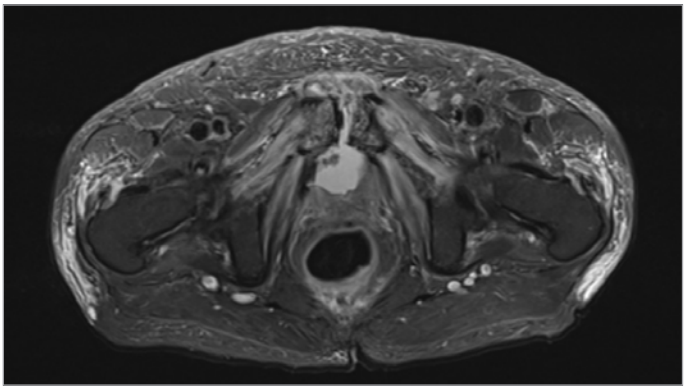

Figure 1. *pelvic MRI showing vesico-pubic fistula and symphysitis.*

[Abstract:0399]

SYPHILIS, THE GREAT SIMULATOR

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Case Description: 34-year-old male, with no personal history of interest, who was referred to the Internal Medicine Day Hospital for generalised exanthema under study. The patient reported the development of generalised rash on the back and anterior thorax, non-pruritic, affecting palms and soles. There was no dystrophic sensation or associated constitutional syndrome. He denied the possibility of toxicoderma. Insisting on the anamnesis, she reported risky sexual intercourse 3 weeks prior to the onset of the clinical picture, with no evidence of urethritis or proctitis.

Clinical Hypothesis: In the differential diagnosis of exanthema, we raised the possibilities of infection by rickettsia, syphilis, hand-foot-mouth syndrome, acute pharyngotonsillitis, ringworm and dehidrotic eczema.

Diagnostic Pathways: Given the diagnostic possibilities raised and the personal history of risky sexual relationship, serology was requested including HIV, Hepatitis, Syphilis, Syphilis, Rickettsia, Borrelia, Coxiella, Measles, Coxackie, Parvovirus B19, mycoplasma, rubella; with positive result for syphilis: positive RPR 1/4, positive TPHA positive. Therefore, treatment with penicillin 2.4 MU single IM injection was indicated, with clear clinical improvement of the skin lesions in only 2 weeks.

Discussion and Learning Points: Syphilis is an infectious disease with multisystem involvement caused by the microorganism Treponema pallidum. The primary phase consists of the development of the first lesion on the skin or mucous membranes, known as a chancre, which may be single or multiple. The secondary phase is characterised by mucocutaneous and systemic manifestations. Subsequently, the patient enters a latent period during which diagnosis can only be made by serological tests.

Keywords: *syphilis, cutaneous, exanthema*

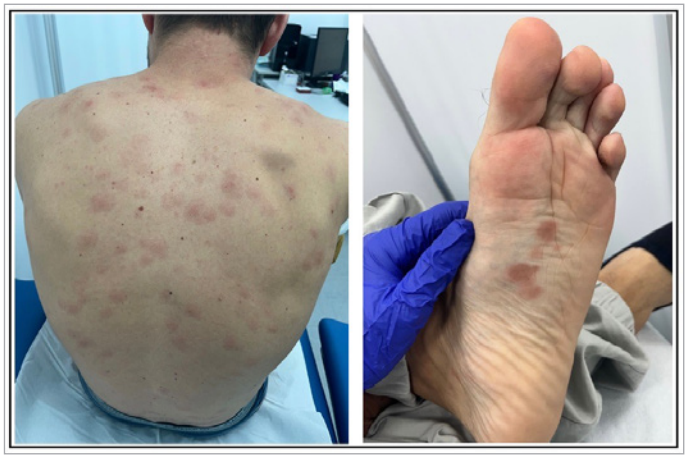

Figure 1. *Generalised cutaneous exanthema on the back and anterior chest, non-pruritic, affecting palms and soles.*

[Abstract:0420]

ACUTE HEPATITIS IN A PATIENT WITH RECENT HISTORY OF THROMBOTIC THROMBOCYTOPENIC PURPURA TREATED WITH RITUXIMAB: REMEMBER HEPATITIS E VIRUS

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Case Description: A 36-year-old man with a history of Hodgkin's lymphoma in complete remission for 15 years and thrombotic thrombocytopenic purpura treated with rituximab six months ago, presented with new-onset painless jaundice and malaise. No history of alcohol uptake, drugs or toxins was recorded, while he reported recent consumption of mussels. Initial laboratory examinations revealed transaminitis (ALT: 4222 U/L, AST: 2451 U/L), hyperbilirubinemia (TBil: 5.4 mg/dL, DBil: 3.6 mg/dL), hypogammaglobulinemia (IgG: 441 mg/dL, IgM: 26.7 mg/dL), albumin: 4.2 g/dL, INR: 1.15, HCT: 46%, PLTs: 207 K/μL, WBC: 5.96 K/μL (PMN: 57%, LYM: 33%), CRP: 1.24 mg/dL, ESR: 19 mm/h and absence of schistocytes in peripheral smear. Abdominal ultrasound and MRCP were normal.

Diagnostic Pathways and Therapeutic Approach: Screening for HAV, HBV, HCV, HDV, CMV, EBV, Parvo-B19 and autoantibodies for autoimmune hepatitis/PBC were negative. Liver biopsy

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showed non-specific alterations of chronic-active hepatitis. Considering probable hepatitis of autoimmune origin in the background of humoral immunodeficiency, methylprednisolone 32 mg and intravenous immunoglobulins 30 g were administered, with initial response. However, hepatitis relapsed one month later during corticosteroids tapering. At this timepoint, PCR for hepatitis E virus (HEV) was performed and detected 2.74 X 10^7 IU/mL HEV RNA. Ribavirin 1 g/day was administered in a 3-month-course. Liver biochemistry was normalized 15 days later and remained in normal values. In line with this, HEV RNA significantly decreased 1-month post-treatment (9.480 IU/mL) and was undetectable 3 months after ribavirin administration, indicating sustained virological response (SVR).

Discussion and Learning Points: In patients who received anti-CD-20 regimens and present with acute hepatitis of unknown origin, HEV screening should be performed. A 3-month-course of Ribavirin followed by SVR assessment is an effective therapeutic approach in immunosuppressed patients.

Keywords: *hepatitis E, ribavirin, immunosuppression, rituximab*

[Abstract:0436]

A CASE OF TICK-BORNE MENINGOENCEPHALITIS

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Purpose: A 23 year-old male of Pakistani origin, was admitted to our department due to fever, shiver, nausea, vomiting, anorexia, photophobia, neck pain and occipital headache.

Methods and Findings: Clinical examination revealed nuchal rigidity, drowsiness, gait imbalance, while the main laboratory findings were mild hyponatremia and a short INR elevation.

After excluding oedema or other cerebral anomaly by a brain CT, a lumbar puncture was performed. Cerebrospinal fluid (CSF) microscopy revealed 490 nucleated cells (75% lymphocytes), indicating a central nervous system infection. Gram stain was negative and CSF culture was sterile. A multiplex PCR was unrevealing for a variety of common microbes related to CNS infection.

Taking into consideration the type of white blood cells in CSF (lymphocytes) and epidemiological features related to our patient (working as a shepherd in a rural area of Greece, possible consumption of unpasteurized dairy products, Pakistani origin and living in an overcrowded small apartment with other compatriots), our differential diagnosis included Tuberculosis, Brucellosis, Leptospira, West Nile and Tick-borne encephalitis.

Accordingly, Rose Bengal/Wright Coombs and antibodies against Leptospira were negative in serum. Additional, CSF cultures for *Mycobacterium tuberculosis* and *Brucella melitensis*, were also negative. Patient's serum tested positive for IgM and IgG antibodies for tick-born encephalitis (ELISA, commercial kit).

Conclusions: Identifying the cause of CNS infection is not always an easy task. Detailed patient's history and sufficient knowledge of existing epidemiological factors might be of great benefit, as they can guide our diagnostic approach to the right direction.

Keywords: *tick, meningoencephalitis, fever, unpasteurized products*

[Abstract:0448]

A DIAGNOSTIC DILEMMA

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Case Description: A 51 y.o female, on methylprednisolone for unspecified autoimmune disease, was admitted due to high fever. Physical examination revealed hepatosplenomegaly, while laboratory results included pancytopenia and elevated CRP.

Clinical Hypothesis: Blood and urine cultures were ordered, and broad-spectrum antibiotics were administered to no avail. Further testing revealed hypertriglyceridemia, hyperferritinemia, elevated LDH and hypofibrogenemia. Although bone marrow biopsy was negative for hemophagocytic lymphohistiocytosis (HLH), HScore was highly indicative of the disorder and a thorough investigation on the trigger took place.

Diagnostic Pathways: Differential diagnosis of HLH trigger included haematological and other malignancies, that were ruled out by PET CT-Scan, infections, albeit with negative cultures and viral antibody testing, and autoimmune disease complication which was, at the time, the most possible diagnosis. High dosage corticosteroids were administered, to which the patient showed no response. A second bone marrow biopsy confirmed the presence of HLH. Testing on zoonoses and vector-borne diseases resulted in a positive PCR for Leishmania on blood sample, while antibody titer was constantly negative due to the patient's immunosuppression. Liposomal Amphotericin B was introduced to the therapeutic regimen and the patient showed clear signs of improvement and was eventually discharged.

Discussion and Learning Points: HLH is a rare and life-threatening disorder with heterogeneous clinical and laboratory manifestations, constituting a diagnostic challenge. With the present case we aim to showcase the importance of HScore in HLH diagnosis and validity of PCR testing for Leishmania in immunocompromised patients

Keywords: *leishmaniasis, hemophagocytic lymphohistiocytosis, liposomal amphotericin b*

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[Abstract:0457]

AN AGGRESSIVE CASE OF TUBERCULOSIS IN A PATIENT WITHOUT KNOWN IMMUNODEFICIENCY

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A 14-year-old man consulted for fever and dry cough in the last two months, accompanied by asthenia and night sweats. He was asthmatic and his identical twin suffered from primary cerebral lymphoma. Physical exam was normal. Blood test showed an elevation of C reactive protein (36.2 mg/L), lactate dehydrogenase (484 U/L) and angiotensin converting enzyme (>100 U/l). HIV serology was negative. Mantoux was 10 mm. A chest X-ray revealed a bilateral micronodular pattern (Figure 1). Complementary tests were pending when he presented an intense headache without neurologic deficits. Head computer tomography (CT) revealed multiple millimetric lesions with ring enhancement (Figure 2). Fungal/mycobacterial infections, sarcoidosis or lymphoproliferative disorders were suggested as differential diagnoses. A sample of cerebrospinal fluid (CSF) was collected under neurosurgeon surveillance, and antituberculous treatment (isoniazid, rifampicin, pyrazinamide and ethambutol) with steroids was immediately started. Chest CT showed multiple bilateral micronodules and fibrobronchoscopy was performed for sampling. Bacterial and fungal cultures, *Cryptococcus* antigen, immunophenotype, polymerase reaction chain for. *Mycobacterium tuberculosis* and 16S/ITS rRNA sequencing were all negative in both CSF and lung samples. Lung biopsy showed necrotizing granulomas without acid-fast bacilli (Figure 3). Finally, *M. tuberculosis* was isolated from bronchial sample and definite diagnosis was made. Patient completed antituberculous treatment for 12 months successfully.

We present an aggressive case of tuberculosis in a patient without known immunodeficiency whose twin also had a pathology typically related to immunosuppression. Some kind of family immunodeficiency was suspected, but no findings were obtained after a full immunological assessment, including gamma-interferon genetic and functional tests and mendelian susceptibility to mycobacterial.

Keywords: *tuberculosis, granuloma, mycobacteria*

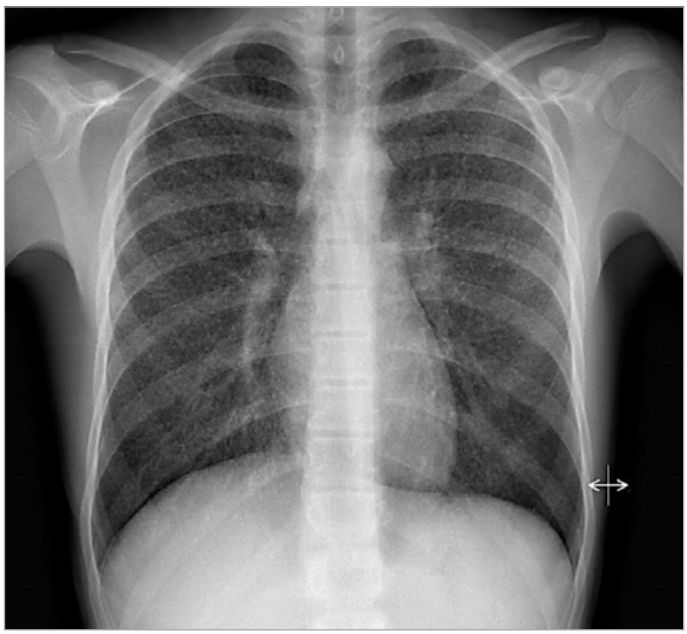

Figure 1. *Chest x-ray showing a bilateral micronodular pattern*

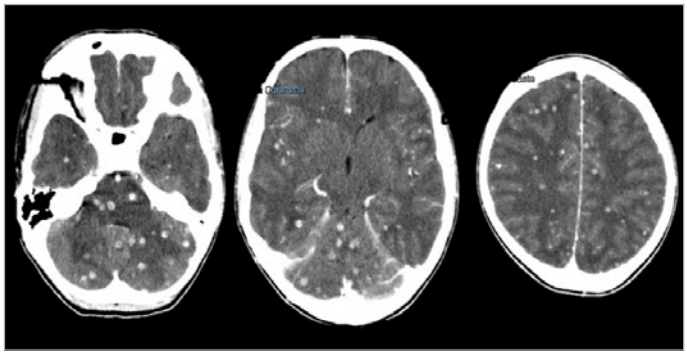

Figure 2. *Head CT revealing multiple millimetric lesions with ring enhancement*

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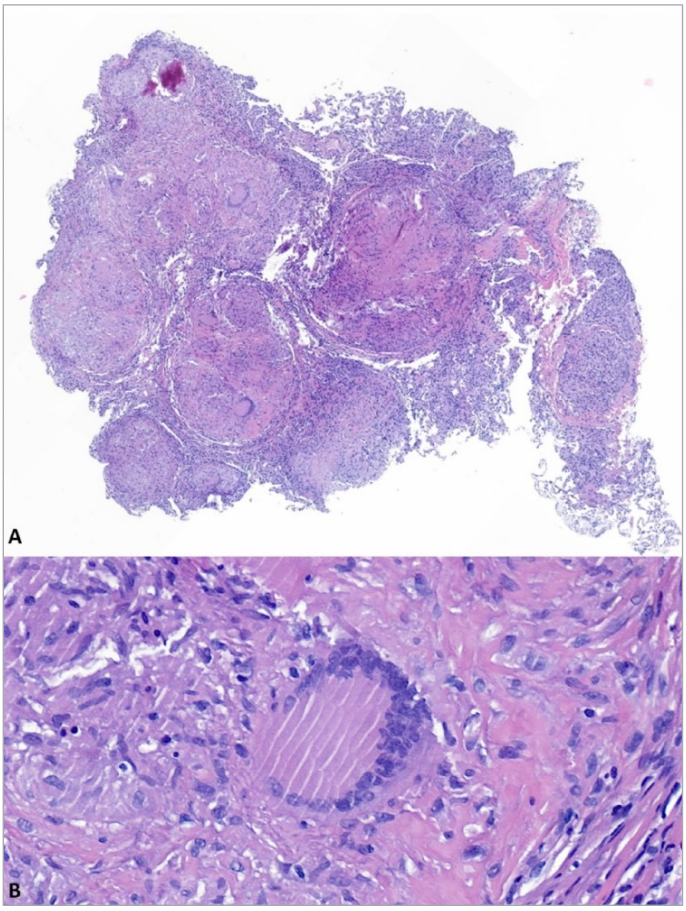

Figure 3. Transbronchial lung biopsy, haematoxylin-eosin stain. A, general view showing multiple epithelioid granulomas, some of them necrotizing. B, detail view of a Langhans giant cell.

[Abstract:0459]

PROGNOSTIC VALUE OF PROCALCITONIN IN HIV PATIENTS ADMITTED TO THE EMERGENCY DEPARTMENT FOR CLINICAL SUSPICION OF INFECTION

Luigi Celani, Francesco Ceppa, Giacomo Spaziani, Gloria Rozzi, Maria Lumare, Stefania Gemma, Gianluca Tullo, Licia Antonella Scatà, Marta Sacco, Martina Candela, Francesco Franceschi, Marcello Covino

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The aims of the study were to evaluate the prognostic value of procalcitonin (PCT) in HIV patients admitted to the Emergency Department for clinical suspicion of infection and assessed its association with mortality. While the diagnostic utility of PCT in infected patients has been investigated in previous studies, there is paucity of data regarding its prognostic value in this population. We investigated 289 HIV-positive patients. Clinical data, including PCT levels and viro-immunological status were collected from 2018 to 2022.The primary endpoint was mortality and length of hospital stay (LOS)

We investigated data of 289 HIV-positive patients. The median age was 54 years [IQR 42-62], 35% presented detectable viremia, the median T lymphocytes CD4+ count was 358 [IQR 104-531]. Elevated PCT levels (≥ 0.5 ng/dL) was detected in 69 (23.8%) patients. Among them, an association was observed between elevated PCT and increased mortality risk ($p < 0.05$). 15 patients with detectable HIV-viremia died, and a majority (60%) were not on antiretroviral therapy. The mortality rate among patients with detectable HIV-viremia was higher compared to those undetectable viremia ($p <0.05$). Deceased patients had lower CD4+ values ($p<0.001$). LOS was higher in the patients with elevated PCT ($p<0.029$).

Elevated procalcitonin levels in HIV patients admitted to the Emergency Department are associated with an increased risk of mortality. Detectable viremia and lower CD4+ amplifies this risk. These findings emphasize the utility of procalcitonin as a prognostic marker in HIV patients, aiding clinicians in identifying those at higher risk, improving therapeutic strategies surveillance.

Keywords: *HIV, procalcitonin, infection, mortality, emergency department, prognostic marker*

[Abstract:0477]

INCIDENCE OF SEXUALLY TRANSMITTED DISEASES IN THE ERA OF HIV PRE-EXPOSURE PROPHYLAXIS IN A TERTIARY HOSPITAL

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Purpose: analysing the change in STI incidence among patients on PrEP treatment at tertiary hospital.

Methods: Retrospective observational study that included patients who had been on PrEP treatment for at least 6 months. The incidence of STIs was analysed in the year before starting treatment and at 6 months after starting therapy. Epidemiological, clinical and analytical data were collected in the SPSS program.

Findings: Fifty-nine subjects were included, with a mean age of 38.7±11.7 years, of whom 98.3% (58/59) were male. The most common types of STIs before and after PrEP are described in Table 1. Inclusion criteria for initiation of PrEP are set out in Table 2. One patient was diagnosed with human immunodeficiency virus (HIV) in the study prior to starting PrEP therapy. The mean follow-up time of patients was 19.4±8.4 months. The mean glomerular filtration rate prior to PrEP was 88.6±7.3ml/min/1.73m^2 and 6 months after PrEP 86.2±7.9ml/min/1.73m^2 ($p=0.05$). 77.0% (47/61) of subjects had good adherence to treatment and 23% (14/61) acknowledged adherence failures. Among patients with good adherence to PrEP STIs were diagnosed in 22.8% (10/44) and in 33% (4/12) of those with poor adherence ($p=0.3$).

Conclusions: More than half of the patients who started PrEP

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had a previous STI. Syphilis was the most frequent infection both before and after treatment initiation. There was a trend towards more STIs among patients with poorer adherence to treatment. Glomerular filtration rate worsened significantly after six months of PrEP therapy but with little clinical relevance.

Keywords: *PrEP, STIs, syphilis*

	STI before PrEP	STI after PrEP
Total (n=59)	37 (62.7%)	14 (25%)
Syphilis	28 (47.5%)	8 (14.3%)
Urethritis C. trachomatis	3 (5.1%)	4 (7.1%)
Urethritis N. gonorrhoeae	6 (10.2%)	2 (3.6%)
Urethritis Ureaplasma spp.	6 (10.2%)	3 (5.4%)
Monkeypox	0	2 (3.6%)
Scabies	4 (6.8%)	0

Table 1. *Incidence of sexually transmitted infections before and after PrEP initiation.*

Types of inclusion criteria	Total (n = 59)
Several criteria	41 (69.5%)
STI the previous year	37 (62.7%)
More than 10 different sexual partners in the last year	12 (20.3%)
Received HIV post-exposure prophylaxis	3 (5.1%)
Sex workers	1 (1.7%)

Table 2. *Types of inclusion criteria for the initiation of PrEP therapy.*

[Abstract:0478]

DOCTOR, MY EYE HURTS AND THESE DROPS DON'T DO ANYTHING!

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[2] Hospital de Puerta del Mar, Cádiz, Spain

We present a 65-male with only history of type-2 Diabetes Mellitus who was admitted to our consult because of eye pain since two months ago, with no improve with topic treatment (tobramycin, dexamethasone). Because of worsening with the appearance of intense pain, he was evaluated by an ophthalmologist with the diagnosis of scleritis and remitted to our Service to continue studies. At the anamnesis he did not refer arthritis, oral ulcers, Raynaud's phenomenon, rhinitis or similar. A complete analysis was requested with determination of inflammatory markers, rheumatoid-factor, anti-nuclear antibodies, anti-neutrophil cytoplasmic antibodies, anti-cyclic citrullinated peptide and complement, which were normal. Serologies were also requested, obtaining positive results for *Treponema pallidum* (TPHA-1/1280, RPR-1/128). 6 days after our evaluation, the patient went to the Emergency Department due to worsening pain, revealing conjunctival oedema with corneal thinning, compatible with necrotizing scleritis. Assessing the previous complementary tests, a lumbar puncture was performed, showing a biochemical analysis of the cerebrospinal fluid (CSF) with 22 leukocytes (100% mononuclear) and proteins 44.8 mg/dL. Given the high risk of ocular perforation, he was admitted to endovenous treatment with penicillin and corticosteroid. TPHA 1/640 and VDRL 1/4 titer in CSF were obtained.

Scleritis is a serious pathology due to the disabling pain and potential complications, including ocular perforation. In half of the cases it is related to systemic disease, particularly rheumatoid arthritis and granulomatosis with polyangiitis, although we cannot forget the "great simulator": syphilis.

The diagnosis of necrotizing scleritis is an emergency that requires general and specific treatment.

Keywords: *scleritis, necrotizing-scleritis, syphilis, penicillin*

[Abstract:0481]

INFECTIVE ENDOCARDITIS: A CHALLENGING DIAGNOSIS

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Case Description: Female, 56 years-old, diagnosed with Marfan's Syndrome complicated by aortic dissection with valve replacement and aortic arch surgery. Six months after surgery, the patient presents to the emergency department with fever (40 ºC) and dyspnoea for 1 week. Physical examination showed no alterations besides the ones related to her condition.

Clinical Hypothesis: Infective endocarditis (IE) of prosthetic valve and/or infection of aortic conduct.

Diagnostic Pathways: Blood tests showed C-reactive protein elevation (275 mg/L) and mild leucocytosis. Chest radiography/CT-scan without alterations compatible with infection. Empirical antibiotics were initiated, considering the hypothesis of prosthetic valve IE, adjusted when an *Enterococcus faecalis* was isolated in 4 blood cultures. Transthoracic and transoesophageal echocardiogram showed no vegetations. Eleven days after admission, the patient had a sudden alteration of consciousness. Cranial CT-scan showed right frontal voluminous haemorrhage with ventricular rupture, and several other scattered haemorrhagic foci, fulfilling 1 major and 3 minor 2023 Duke-ISCVID criteria. To support the diagnosis of IE and conduct infection, 18F-FDG PET-CT was ordered, marking high metabolic rate at the aortic valve prothesis and aortic conduct.

Discussion and Learning Points: The diagnosis of IE and conduct infection should always be considered in patients with

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predisposing factors presenting with fever, even when clinical manifestations are not specific. Since detection of the symptoms, diagnosis and early treatment are crucial for a better prognosis of the patient. Although neurological manifestations are the most frequent and severe extra-cardiac complications of IE, they can be silent for several months.

Keywords: *infective endocarditis, Marfan's syndrome*

[Abstract:0486]

FACTORS ASSOCIATED WITH INTRA-HOSPITAL MORTALITY IN PATIENTS ADMITTED FOR SEVERE INFLUENZA VIRUS INFECTION

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Department of Elda, Alicante, Spain

Influenza infection is very common and has a significant impact on societal health, leading to a substantial consumption of healthcare resources. The main objective of this study is to understand intra-hospital mortality and the factors associated with it in patients admitted for severe respiratory infections caused by influenza virus A or B.

We conducted a retrospective analytical observational cohort study, including patients over 18 years of age admitted to the hospital ward for severe respiratory infection by influenza virus, during the months of January to December 2022.

The sample consisted of 100 patients. A univariate analysis of association with mortality was performed, and variables with a significant association with mortality were included in a multivariate analysis. The included variables were sex, age, Charlson index, confusion, $SatO_2$ <94%, SBP <100 mmHg, CRP greater than 120 mg/dL, and frailty. Finally, frailty (p=0.038, OR=10.83, 95% CI 1.2-166), marked elevation of C-reactive protein (CRP) above 120 mg/dL (p=0.018, OR 13.29, 95% CI 1.7-216), and systolic blood pressure less than 100 mmHg (p=0.020, OR=12.87, 95% CI 1.5-215) were significantly associated with mortality.

In conclusion, the presence of frailty, marked elevation of CRP, or hypotension upon admission are associated with intra-hospital mortality. These factors may serve as predictors of an unfavourable outcome in influenza-related respiratory infections requiring hospitalization.

Keywords: *influenza, mortality, respiratory infection.*

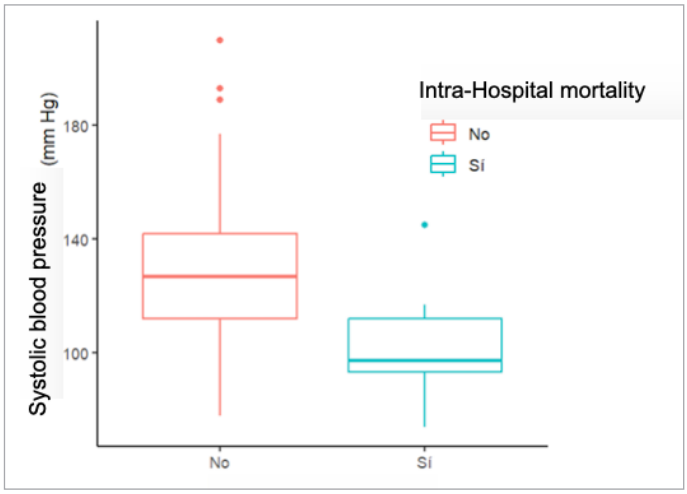

Figure 1. *Comparison os intra-hospital mortality according to blood pressure levels at admission.*

[Abstract:0487]

LUNG NODULES IN A TRANSPLANT PATIENT WITH A HISTORY OF KIDNEY CANCER. CLEARING THE FOG: NOT EVERYTHING IS CANCER

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We present the case of a 62-male who received a kidney transplant in 2021, with history of glomerulonephritis twelve years ago without etiological diagnosis, requiring initiation of haemodialysis. During his follow-up, he was diagnosed with clear-cell renal carcinoma, so a nephrectomy was performed (2014) without the need for adjuvant treatment. Since then, there has been no recurrence of the disease, which is why he is included on the transplant list five years after the diagnosis.

A CT-scan performed as part of the follow-up protocol for a history of neoplasia revealed nodules in the left lower lobe suspicious for metastasis. After evaluation by the committee, segmental resection was chosen for pathological study, identifying necrotizing granulomas with fungal structures inside. Given these findings, the study was expanded by performing PCR (Polymerase Chain Reaction), positive for *Pneumocystis jirovecii*.

The differential diagnosis of granulomas is broad and can be broadly reduced by the name "necrotizing" to mainly infectious options. In our case, the identification of round and oval fungal structures within the granuloma, with negative Ziehl-Neelsen staining, greatly facilitated the diagnostic process.

In immunosuppressed patients, *Pneumocystis jirovecii* infection may not typically manifest itself in the form of predominantly perihilar interstitial pneumonia, and consolidations, nodules (granulomas), pneumatoceles, etc. may be observed. Sometimes the oncological history clouds other options that, especially in immunosuppressed patients, must be taken into account.

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In our patient, treatment with Cotrimoxazole was started with good radiological response.

Keywords: *granuloma, kidney transplant, Pneumocystis jirovecii, immunosuppression*

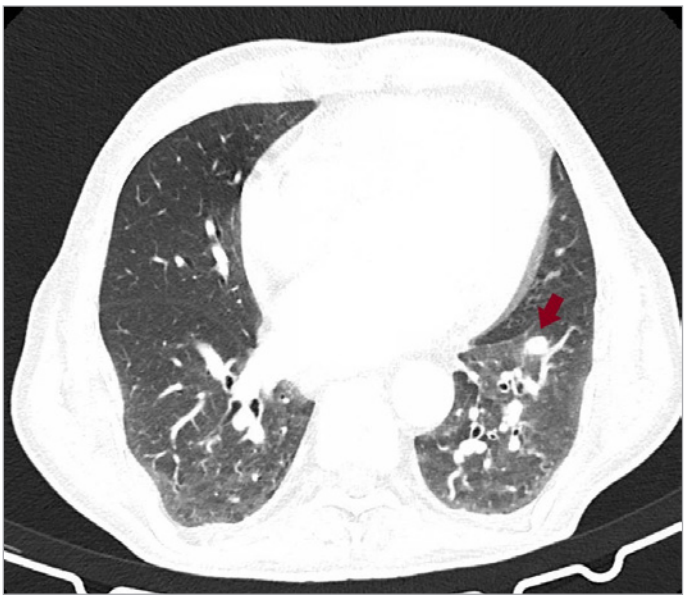

Figure 1. *CT. Nodule in left lower lobe.*

[Abstract:0489]

PERSISTENT MALARIA OR TREATMENT SIDE EFFECT?

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A 70-year-old woman, originally from Equatorial Guinea, in Spain since 1977, presented to the emergency department generally unwell referring fatigue and ankle oedema. She denied fever or any additional symptoms. She had recently returned from a two-month trip to her home country. She did not receive antimalarial prophylaxis. Three weeks into her trip she was diagnosed with malaria and treated with artemether/lumefantrine for three days with initial clinical improvement but exhibiting new symptoms upon her return.

On admission, she was hemodynamically stable and afebrile. Her blood test showed raised bilirubin, LDH and CRP; normocytic-normochromic anaemia (Hb 6.9 g/dl) with raised reticulocytes, decreased haptoglobin (9 mg/dl) and negative direct Coombs test. Iron levels, B12 and folate were normal. Rapid malaria antigen test was positive but thick and thin films were negative for malaria. Dengue antigen test was negative.

A diagnosis of non-autoimmune haemolytic anaemia post-artemisinin derivative treatment, requiring blood transfusion. Follow-up showed improved haemoglobin levels.

Persistent malaria could not be excluded, therefore she was re-treated using piperaquine-dihydroartemisinic for 3 days. Blood *Plasmodium falciparum* PCR blood remained positive for 5 weeks following initial treatment.

This case highlights three main points for malaria management. Artemisinin derivatives, especially intravenous artesunate, can cause haemolytic anaemia, and require post-treatment monitoring. Persistent *Plasmodium falciparum* PCR, can happen up to 8 weeks from initial treatment, in the presence of symptoms retreatment should take place, as well as considering management failure due to inadequate initial diagnosis, counterfeit medication or artemisinin resistances. Malaria prophylaxis is key in preventing malaria infection in VFR.

Keywords: *malaria, haemolytic anaemia, Plasmodium falciparum*

[Abstract:0500]

CLOSTRIDIOIDES DIFFICILE INFECTION IN A THIRD LEVEL HOSPITAL CENTRE: EVALUATION OF RECURRENCES

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Purpose: To assess the current epidemiological, clinical and prognostic characteristics of patients admitted for *C. difficile* infection as well as their recurrence rate.

Methods: Single-centre retrospective observational study. Based on an initial sample of 485 patients admitted between 2016-2022 to the HUMV with a primary or secondary diagnosis of *C. difficile* infection. Ninety-two patients with 120 episodes were randomly selected for subsequent analysis. Medical records were reviewed, and epidemiological, clinical and microbiological variables were collected at the time of diagnosis and at 90-day follow-up. Quantitative variables are expressed as median and categorical variables as percentages. In the evaluation of the association between different variables and recurrence, X2 was used with the OR and CI95 as an indicator of the intensity of the association. The SPSS statistical package was used for the statistical calculation.

Results: The baseline characteristics of our patients are shown in table 1. Ninety-three percent of patients were treated. Treatments are listed in table 2. At discharge follow-up, 21 (22.7%) recurrences were detected. The type of recurrence and mortality rates are shown in table 3. Treatment with metronidazole versus vancomycin was not inferior in recurrences (p>0.05). Other epidemiological and clinical factors related to recurrence were evaluated and no significant differences were detected in any of the variables studied (p>0.05).

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Conclusions: The most common type of recurrence of *C. difficile* infection is relapse. The most frequently used treatment was vancomycin. We found no association with any of the factors classically associated with recurrence.

Keywords: *Recurrence, relapse, reinfection, vancomycin.*

Median age (years)	77.5
Males n - (%)	63 (52.5)
Hypertension n - (%)	81 (68.1)
Dyslipidaemia n - (%)	44 (37)
Diabetes mellitus type 2 n - (%)	39 (34.5)
CKD n - (%)	49 (41.2)
Immunosuppressed n (%)	30 (25.2)
Charlson index (median)	6
History of previous antibiotic n - (%)	97 (82.2)
History of previous PPIs n - (%)	82 (69.5)
History of hospital admission in the previous three months n - (%)	75 (63)
Residents in socio-health centres n - (%)	10 (8.4)
Average days of stay (median)	11

Table 1. *Baseline patient characteristics.*

Vancomycin in monotherapy n - (%)	61 (50)
Metronidazole in monotherapy n - (%)	34 (27.9)
Fidaxomicin in monotherapy or associated with vancomycin or bezlotoxumab n - (%)	17 (15)

Table 2. *Treatment.*

Relapses n - (%)	12 (13%)
Reinfection n - (%)	4 (4.3%)
Multiple recurrence n - (%)	5 (5.4%)
All-cause hospital mortality (%)	5%
All-cause mortality at 30 days (%)	8.3%

Table 3. *Recurrence types and mortality rates.*

[Abstract:0506]

BEYOND A MERE TONSILLITIS: SAVED BY PROCALCITONIN

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[2] Hospital Universitario Clínico San Cecilio, Infectious Diseases Department, Granada, Spain

We present the case of an 18-year-old female who presented to the Emergency Department with a two-week history of fever. The patient reported pharyngodynia and odynophagia for the past 14 days. Despite antibiotic therapy, the fever and clinical symptoms persisted. The patient exhibited hypotension (90/65 mmHg) and fever (38°C.) Physical examination revealed tonsillar hypertrophy and erythema without purulent exudate, as well as cervical lymphadenopathy and tenderness in the right cervical region.

Remarkably, laboratory results showed significantly elevated acute-phase reactants, with a C-reactive protein of 265 mg/L and a procalcitonin of 58 ng/mL. Internal Medicine was consulted for further evaluation of these findings.

We decided to request a contrast-enhanced computed tomography of the neck and head, which revealed infectious thrombophlebitis of the right internal jugular vein secondary to a right parapharyngeal abscess, suggestive of Lemierre's syndrome (Figures 1-2). The chest X-ray showed an embolic lung abscess, subsequently confirmed on CT scan (Figure 3). *Fusobacterium necrophorum* grew in blood cultures. Antibiotic therapy was initiated, and the patient showed excellent progress.

Lemierre's syndrome is a rare but potentially serious condition due to the systemic complications it can trigger. Diagnosis is based on clinical suspicion, radiological evaluation, and microbiological confirmation. The primary treatment involves antibiotic therapy, targeting anaerobic pathogens (especially *F. necrophorum*) and *Streptococcus pyogenes*. In this case, apart from persistent fever, there were not many alarming signs to suggest that our young patient had a potentially fatal infection. It was the elevated procalcitonin level that alerted us and prompted the investigation for an associated complication.

Keywords: *Lemierre, tonsilitis, procalcitonin*

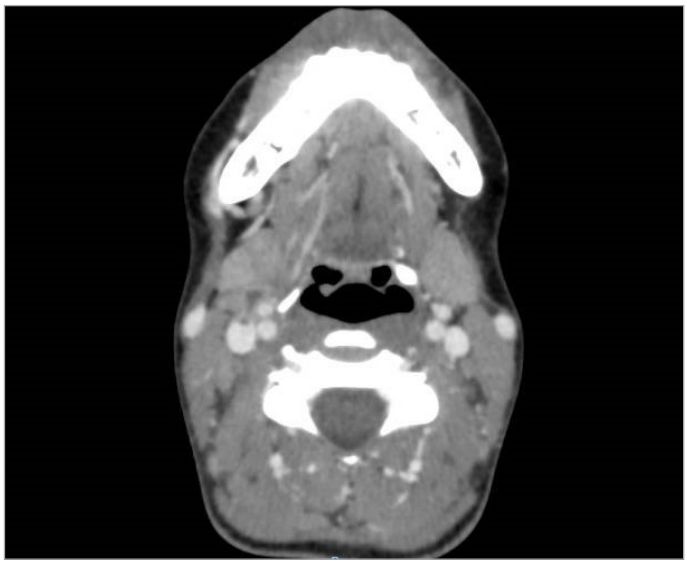

Figure 1. *Right parapharyngeal abscess.*

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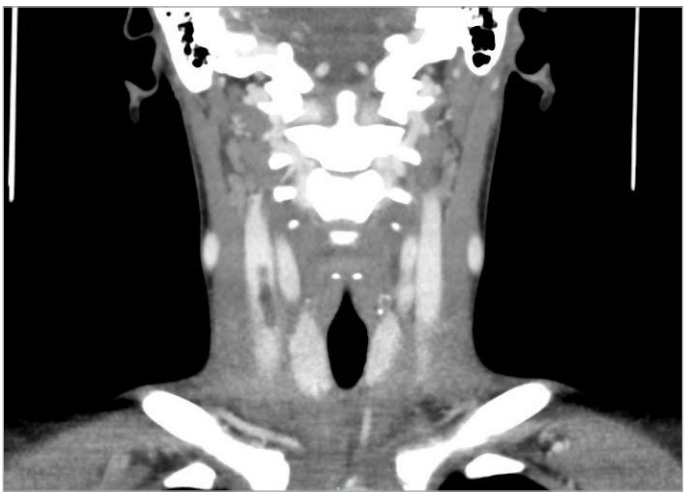

Figure 2. Septic thrombosis in the right internal jugular vein.

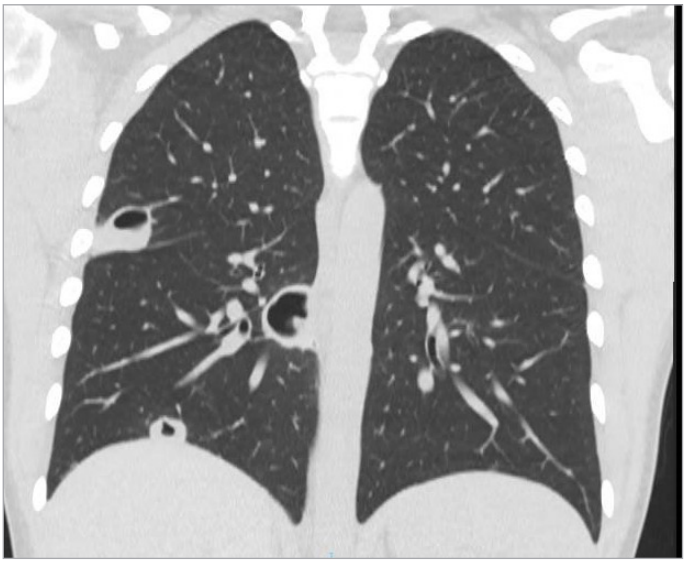

Figure 3. Embolic abscesses in the right lung.

[Abstract:0508]

AIDS ASSOCIATED INTRACRANIAL MASSES

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Department of Internal Medicine, Baskent University Faculty of Medicine, Ankara, Turkey

Case Presentation: 48-year-old man presented with confusion that started after experiencing an accident. He had not been previously diagnosed with any disease and no medication was used. His physical examination the vitals within normal range. At the admission he had an aphasia and limited orientation.

Clinical Hypothesis: In Our clinical hypothesis included toxoplasma encephalitis, metastasis, glioblastoma multiforme or primary CNS lymphoma

Diagnostic Pathways: In his radiological images, intracranial masses were detected which assessed as gliomas. In our investigations, we detected that the patient had HIV and consequently he was diagnosed with AIDS. After the re-evaluation of the patient's condition, we believed that the masses may not be glioma. In similar cases, infections must be ruled out first. Then, brain radiological images showed that the masses were multiple and glioblastoma multiforme, primary CNS lymphoma or toxoplasma encephalitis were assessed as a differential diagnosis. Toxoplasma IgG was detected as positive. At the last, brain biopsy, its pathology was necrotic and non-diagnostic for our patient. The appropriate anti-bio-therapies were started in a full dose or in prophylactic doses as a treatment.

Discussion and Learning Points: In AIDS patients with intracranial masses, infections must be ruled out first. The diagnostic approach to a patient with HIV/AIDS as well as a brain mass, should be stepwise considering host factors, laboratory, and advanced brain imaging. The patient's wife had vaginal candidiasis frequently. For that, she was referred to infectious disease to investigate if she has HIV or not.

Keywords: *Toxoplasma encephalitis, primary CNS lymphoma, AIDS*

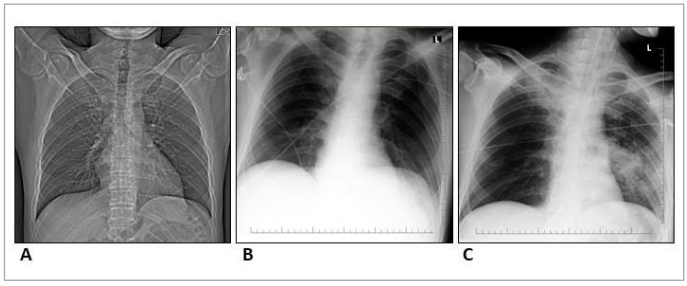

Figure 1. Chest X-ray.

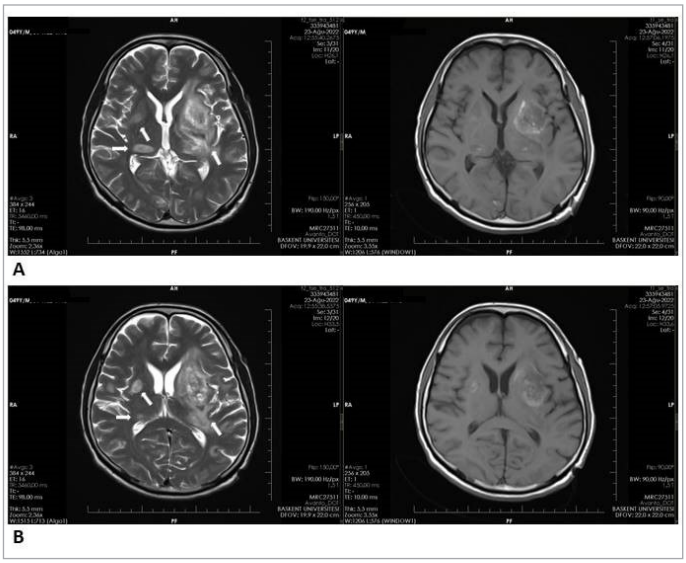

Figure 2. Control MRI.

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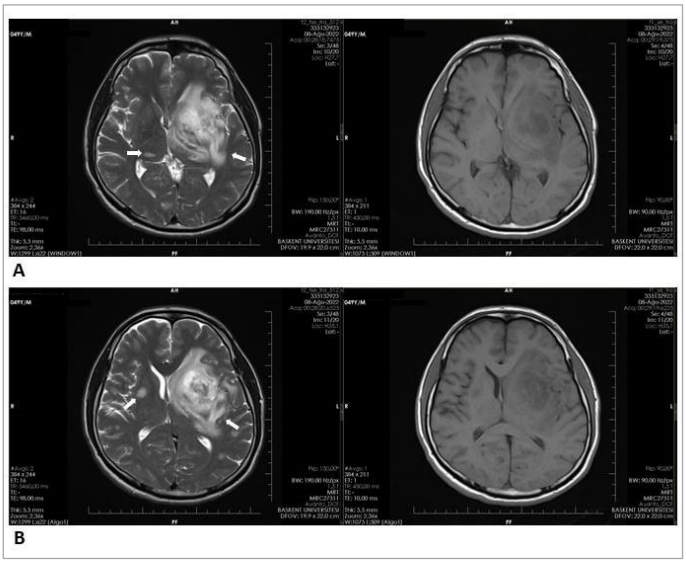

Figure 3. MRI.

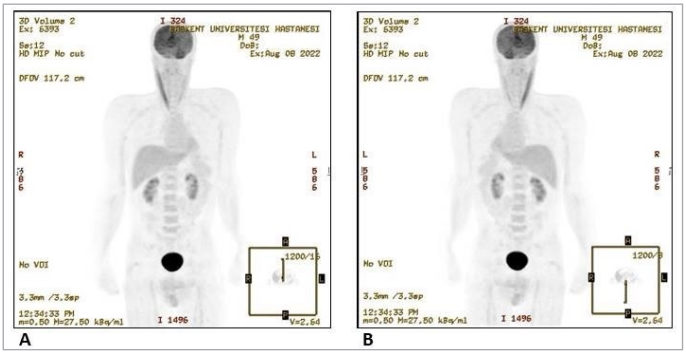

Figure 4. PET-CT.

[Abstract:0510]

PANUVEITIS DUE TO MSSA. A CASE REPORT

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A 70-year-old woman presented to the emergency department with progressive loss of visual acuity in the left eye, fever and night sweats of two weeks duration. On physical examination there was a systolic murmur in an unknown aortic focus and pain and swelling in the left knee.

Ophthalmological evaluation identified panuveitis in the left eye (figures 1, 2, 3) and arthrocentesis of the left knee yielded purulent fluid. Complementary tests showed elevated inflammatory parameters, including a CRP of 28.3 mg/dL and ESR of 120 mm.

Acute renal failure was observed with a creatinine of 1.16 mg/dL, dysmorphic red blood cells, and 24-hour proteinuria of 2 mg/g, without complement consumption. MSSA was isolated from both blood cultures and joint fluid, leading to a treatment with daptomycin and linezolid.

Lumbar MRI displayed abscesses in both psoas muscles and septic thrombosis of the inferior vena cava, and transoesophageal echocardiography ruled out endocarditis. She required drainage of muscle collections and surgical debridement of the knee for adequate control of the focus.

The patient was discharged after 10 weeks of antibiotherapy with a diagnosis of bacteraemia complicated by MSSA with multiple septic emboli, including the left uvea. The initial source of the bacteraemia could not be identified.

Panuveitis is usually a clinical manifestation of an underlying disease, especially rheumatological diseases. While ocular involvement is one of the hematogenous complications of *Staphylococcus aureus* bacteraemia, it usually presents as endophthalmitis. To our knowledge, this is the first case in which the onset of bacteraemia manifested as panuveitis.

Keywords: *MSSA, panuveitis, bacteraemia*

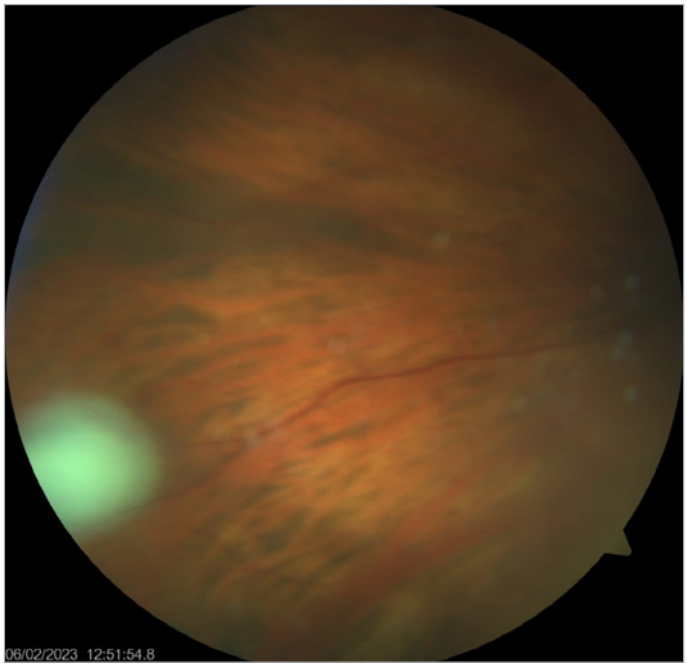

Figure 1. *White retinochoroidal infiltrate with ill-defined borders at the peripheral level.*

White retinochoroidal infiltrate with ill-defined borders at the peripheral level. Vessels can be seen crossing over the lesion, localising it at the choroidal level.

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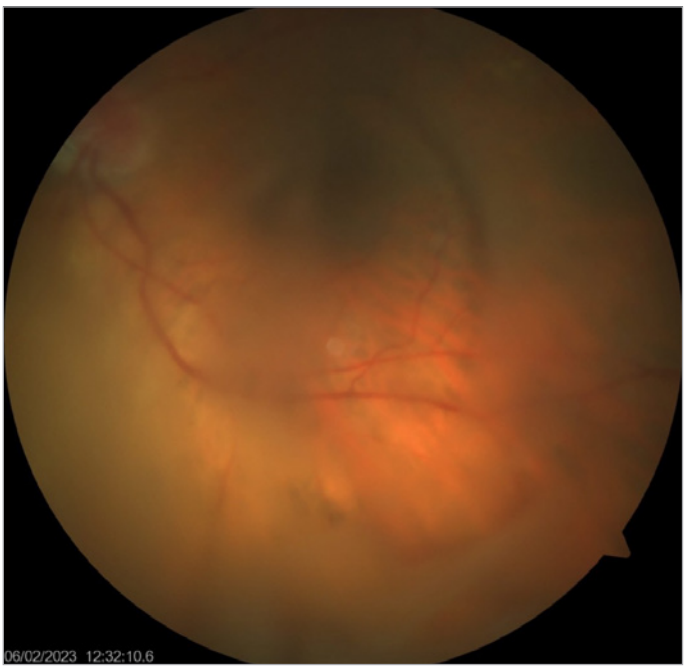

Figure 2. Central vitritis forming vitreous bundles over the macular and foveal area.

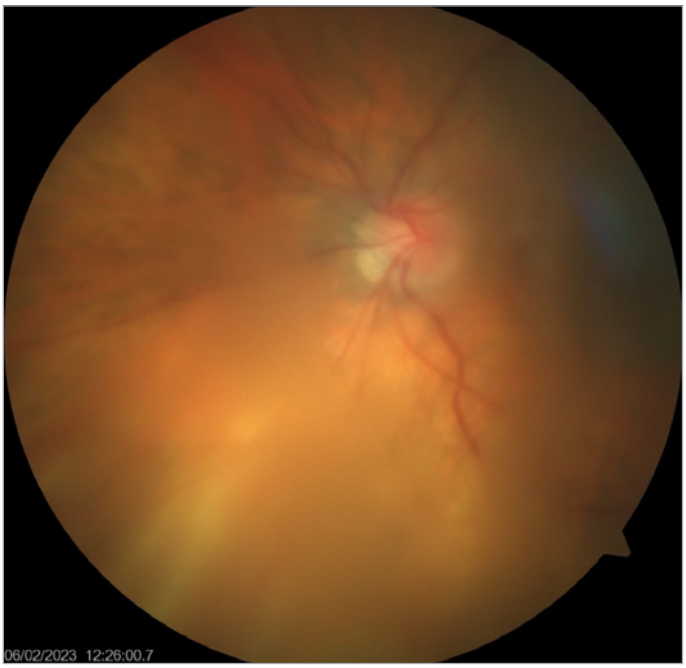

Figure 3. Sectorial, central and inferior vitritis, making it difficult to assess the underlying retina.

[Abstract:0522]

HERPES ZOSTER: A DEVASTATING CONDITION FOR THE PATIENT AND A DIAGNOSTIC CONUNDRUM FOR THE PHYSICIAN

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Purpose: *Herpes zoster* is the reactivation of the varicella zoster virus after a primary infection. Stress, immune suppression and certain disease conditions may predispose to the reactivation resulting in painful, vesicular lesions affecting almost one in three people during lifetime. *Herpes zoster* not only poses an important disease burden in adults, but also a diagnostic challenge for the physicians. Here, we present a case series of *herpes zoster* patients who were finally diagnosed after several physician visits and delays in diagnoses.

Methods: Adult patients who received care in Hacettepe University Hospitals between January 2014 and December 2022 were screened retrospectively and those with ICD codes compatible with herpes infection were recruited. The data of patients who had 3 or more healthcare encounters or more than 30 days from the symptom onset to diagnosis were analysed.

Findings: There were 740 patients with a diagnosis of *herpes zoster*, either inpatient or outpatient. We present a series of patients with regards to their initial symptoms and diagnostic journey. Possible risk factors for a delayed diagnosis and the lessons learnt to close the gaps in clinical decision making are discussed.

Conclusions: *Herpes zoster* infections can lead to devastating pain and post herpetic complications and severely decrease the quality of life of the patients. Moreover, before the eruptions of the lesions, patients can seek care for multiple instances until they get a correct diagnosis. Hence, *Herpes zoster* can be a diagnostic challenge leading to diagnostic errors and overutilization of healthcare.

Keywords: *Herpes zoster, diagnostic error, healthcare utilization*

[Abstract:0545]

NEUROSYPHILIS IN A DISABLED PATIENT WITH WORSENING NEUROLOGICAL CONDITION - A CASE REPORT -

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[2] Department of infectious diesease, Raymond Poincarré Hospital, Garches, France

A 63 year old patient has been hospitalized in our Infectious disease ward for a second episode of erythematous and itchy papula on the upper limbs leaving pink scars associated with a neurological degradation on the motor and sensory levels. The

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etiological investigation carried out will ultimately diagnose tertiary syphilis with associated meningo-radiculitis in a context of a history of risky sexual relations.

Faced with atypical neurological symptomatology, with a negative etiological assessment, it is necessary to know how to investigate and discuss tertiary syphilis. In the event of neurological worsening in a neuro injured patient, it is necessary to know how to discuss a curable diagnosis. We must know how to discuss the diagnosis of syphilis in neuro-injured patients in the same way as other sexually transmitted infections.

Keywords: *neurosyphilis, tertiary syphilis, neurological worsening, roseoliform exenthema, meningo-radiculitis*

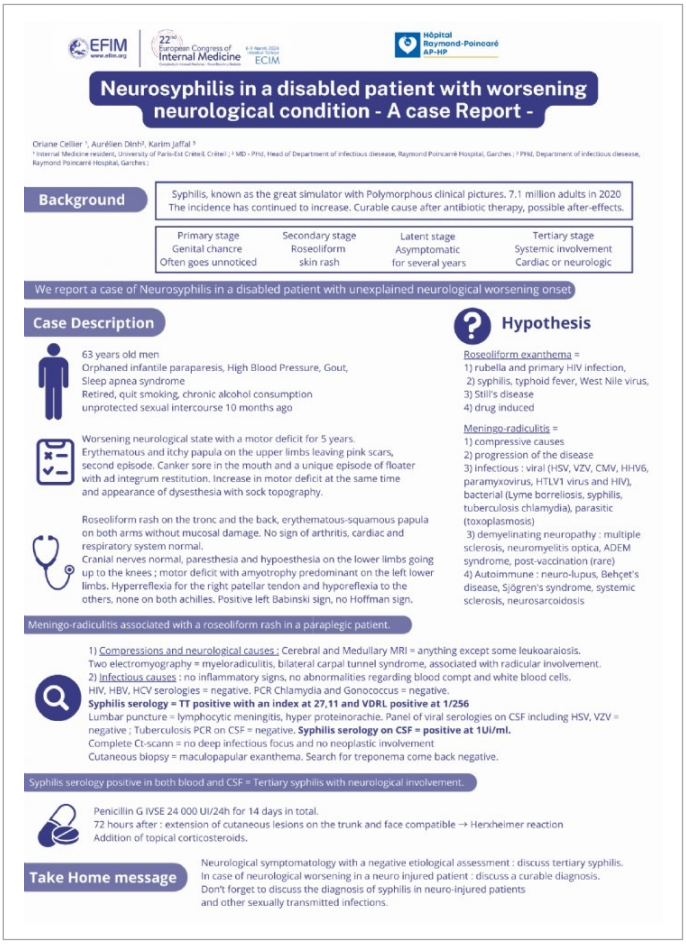

Figure 1. *This is the poster of the clinical case.*

[Abstract:0559]

UNUSUAL PRESENTATION OF AN ABSCESS

Luisa Jiménez Reyes[1], Ana Gómez Berrocal[1], Elena Hoyo Castro[1], Laura Lucía Checa Daimiel[1], Lidia Romero Calvo[1], Laura Martínez Molina[2], Daniel De La Cueva Genovés[3], Victoria Villamonte Pereira[4], Ana Roel Conde[1]

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We present the case of an 85-year-old man with a medical history of hypertension and type 2 diabetes mellitus, who sought emergency care due to seven days of progressive neck pain and right arm paresis. The patient had no history of fever, recent trauma, or recent hospitalization. Physical examination revealed no heat or redness in the affected area, and other findings were unremarkable.

Laboratory investigations demonstrated elevated C-reactive protein (CRP) at 305.2 mg/L, procalcitonin levels of 1.39 ng/mL, and leucocytosis of 16,000 10^3/µL with neutrophilia. Despite normal results on cervical spine and chest X-rays, a cervical MRI revealed myositis and bilateral paraspinal collections from occipital to C4, with one extending into the epidural space, causing spinal cord compression (Figure 1). Empirical treatment with meropenem and linezolid was initiated, and urgent surgical debridement and laminectomy were performed, with microbiological samples obtained.

Staphylococcus aureus was isolated from both abscess samples and blood cultures, prompting a change in antibiotic therapy to cloxacillin and daptomycin, the latter discontinued upon detection of oxacillin sensitivity. Endocarditis was ruled out via echocardiogram, and subsequent blood cultures were negative. Despite treatment efforts, the patient experienced a complicated course, developing a sacral pressure ulcer with evidence of infection. Isolation of Klebsiella pneumoniae carbapenemase type KPC from the ulcer exudate led to initiation of meropenem/vaborbactam therapy. Unfortunately, the patient's condition deteriorated, necessitating multiple surgical debridements and culminating in a fatal outcome.

Keywords: *spinal abscess, paresis, pressure ulcer*

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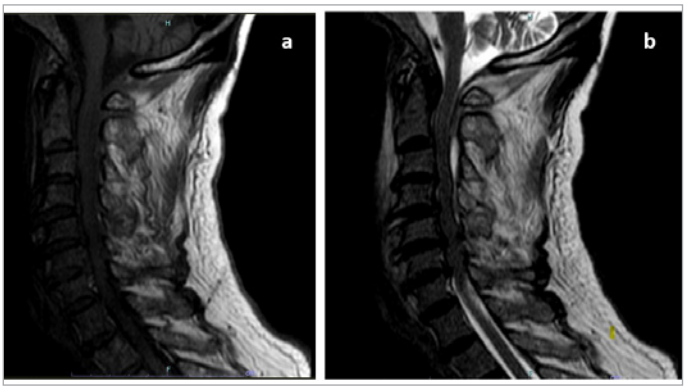

Figure 1. Cervical magnetic resonance image in T1 (a) and T2 (b), showing extensive soft tissue involvement in the cervical region, with signal hyperintensity of the posterior paraspinal musculature, extending from the craniocervical junction to the cervicothoracic transition, all compatible with myositis. Several collections showing diffusion restriction compatible with abscesses, as well as an epidural collection with generalised stenosis of the spinal canal in the cervical spine were identified.

[Abstract:0581]

INCIDENCE OF PERIPHERALLY INSERTED VASCULAR CATHETER ASSOCIATED INFECTIONS IN AN INTERNAL MEDICINE DEPARTMENT

Victoria Villamonte Pereira, Jorge Benítez Peña, Sonia González Sosa, Almudena Gil Hernández, Melody Pérez López, María Dolores Pérez Ramada, Iván Gabriel Marrero Medina, Aída Gil Díaz

Hospital Universitario de Gran Canaria Doctor Negrín, Las Palmas de Gran Canaria, Spain

Background and Aims: To analyse the incidence of infections associated with peripherally inserted vascular catheters (PICC and Midline) in an hospitalized population of Internal Medicine.

Methods: Retrospective observational study including patients admitted to Internal Medicine who required PICC or Midline catheter placement during 2022. We collected demographic variables, previous diseases, as well as the date and reason pf catheter placement and removal, isolated microorganisms and antibiotherapy received. Statistical analysis was carried out with the SPSS program.

Results: A total of 189 patients (47.1% female) were included, of whom 5.8% had device infection. Infection was significantly associated in those patients with more than three points on the Charlson scale (p=0.034; OR 4.2).

This complication was suspected in a total of 20 patients and confirmed in 55%, with no significant differences between genders (p=0.775), catheter type, diameter or lumen. The predominant microorganisms isolated were Gram positive (71.43%). The mean catheter duration was 17.6 days (± 15.5), being longer in those who presented this complication (18 days vs. 10, p=0.05), as well as the mean length of stay (53 days vs. 26, p=0.001). Mortality did not differ significantly between the two groups (33.3% vs. 29.3%).

In terms of treatment, penicillin derivatives were the predominant antibiotics of choice (75%).

Conclusions: 5.8% of patients with peripherally inserted vascular catheters had associated infection, where the predominant microorganism isolated were Gram-positive cocci.

This complication was associated with higher comorbidity, more days since catheter insertion, prolonging the mean hospital stay.

Keywords: *peripherically inserted catheter, Infection, mean hospital stay*

[Abstract:0603]

A CASE OF FUSOBACTERIUM-ASSOCIATED ISOLATED EXTERNAL JUGULAR VEIN THROMBOSIS AND CONCURRENT COVID-19 INFECTION - A VARIANT OF LEMIERRE'S SYNDROME

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[2] Department of Medicine, Hinchingbrooke Hospital, Huntingdon, UK

Lemierre's syndrome is a rare complication of an oropharyngeal infection, leading to thrombophlebitis of the internal jugular vein and sepsis with anaerobic bacteria such as *Fusobacterium necrophorum*. We report a case of a previously healthy 20-year-old with one-week history of sore throat, productive cough, vomiting, rigors, fevers over 39°C and right-sided anterior neck pain. She tested COVID-19 positive 6 days prior. Physical examination revealed a non-exudative red oropharynx and right tender cervical lymphadenopathy. Chest X-ray revealed no obvious consolidation. Blood tests showed C-reactive protein 310, WBC 9.5, Hb 122, platelets 80, neutrophils 9.1, lymphocytes 0.3, D dimer 3733. Blood cultures were positive for *Fusobacterium necrophorum*. CT contrast revealed a thrombus in the right external jugular vein with no evidence of septic embolization (Figure 1). She was treated with 5 days of IV co-amoxiclav and clarithromycin, 2 days of IV metronidazole and discharged with one month of oral co-amoxiclav (500/125 mg TDS), metronidazole (400 mg TDS), and three months of rivaroxaban (20 mg OD). She was reviewed in clinic two weeks later with resolution of infective symptoms. Whilst thrombus in the IJV is typically reported, a few case reports exist which note a variant of Lemierre's syndrome involving only the external jugular vein. COVID-19 infection has been known to induce a prothrombotic state and endothelial dysfunction; concurrent infection may have predisposed to EJV thrombosis. This case is a reminder that whilst rare, Lemierre's syndrome should be considered in patients with a history of oropharyngeal infection and unilateral neck pain.

Keywords: *Lemierre's syndrome, venous thrombosis, COVID-19*

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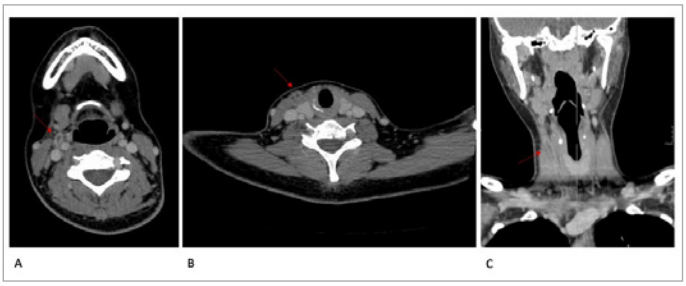

Figure 1. CT neck with contrast.
A linear filling defect is seen within the right external jugular vein (red arrows), in keeping with thrombus. Both internal jugular veins are patent with no thrombus identified. Small bilateral cervical chain lymph nodes measure up to 7mm. No drainable collection identified.

[Abstract:0635]

QUALITY STUDY OF THE USE OF ANTIMICROBIALS IN TARGETED TREATMENT AFTER THE IMPLEMENTATION OF PROGRAMS FOR OPTIMIZING THE USE OF ANTIBIOTICS (PROA)

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Objectives: Analyse the adequacy of targeted antimicrobial treatment before and after the implementation of a program for optimizing the use of antibiotics (PROA).

Materials and Methods: Cross-sectional and observational study in a tertiary level hospital of patients with targeted (once known the aetiology of the infectious process and the antibiogram) and adequate antimicrobial treatment (active against the pathogen causing the infection and correct in dosage, duration, route of administration, and comply with current external and local treatment recommendations).

Results: 165 patients (49.7% women) were receiving antimicrobial treatment, of which 15.8% received targeted treatment. 26.7% before PROA vs 23.1% after PROA of these were classified as inadequate. The main causes were resistance of the microorganism (12.5% vs 33.3%), incorrect dosage (12.5% vs 33.3%), unnecessary drug (25% vs 16.7%) and excessive duration (25% vs 16.7%). The urinary tract was the most frequent source of infection (48%), followed by pneumonia (12%), intra-abdominal (12%) and surgical wound infections (12%). The most used antibiotic was ciprofloxacin (15.4%), followed by ceftriaxone, cefuroxime, levofloxacin and teicoplanin (11.5% each of them) and to a lesser extent, meropenem, cotrimoxazole, fosfomycin, metronidazole, doxycycline and cloxacillin (3.8% each of them).

Discussion: The antimicrobial resistance cases after PROA was due to two patients in whom microbiological results changed after targeted treatment. Ciprofloxacin was probably the most used antibiotic because oral sequencing was promoted.

Conclusions: This study demonstrates greater adequacy of in-hospital targeted antimicrobial treatment after the implementation of PROA and also helps to identify the main lines of work to be reinforced.

Keywords: targeted treatment, inadequacy, PROA,

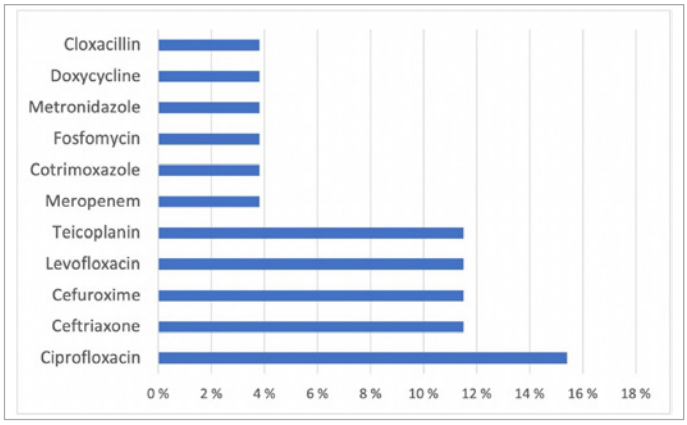

Figure 1. Antibiotics used.

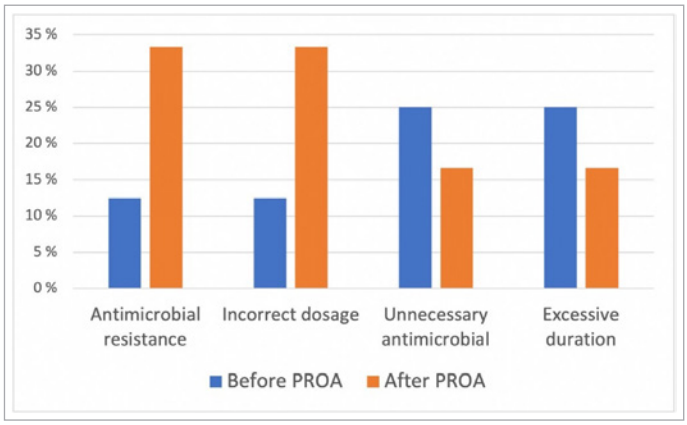

Figure 2. Causes of antimicrobial inadequacy.

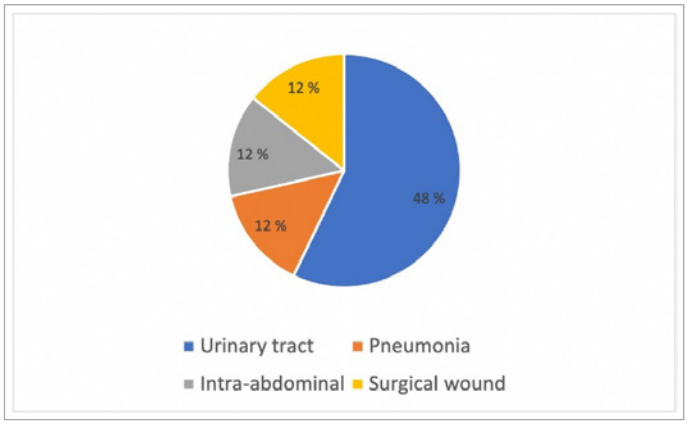

Figure 3. Sources of infection.

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[Abstract:0643]

INFECTIOUS SPONDYLODISCITIS CAUSED BY *SALMONELLA*: A RARE CLINICAL ENTITY

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Spondylodiscitis is a rare disease that has a bimodal presentation, affecting people under 20 years old or between 50-70 years old. Its incidence varies between 1:100000-1:250000 and it has been associated with osteodegenerative disease, prolonged corticosteroid therapy or other immunosuppressive states. Infectious spondylodiscitis caused by the *Salmonella* species is an even rarer clinical entity, and there's no current data on its worldwide incidence. A 71-year-old man was admitted to the emergency department due to right mechanical low back pain associated with paraesthesia and lower limbs' decreased muscle strength, with 3 months of worsening evolution and poor response to analgesia. It's a patient with degenerative osteoarticular pathology exposed to prolonged corticosteroid therapy to treat a presumed autoimmune thrombocytopenia.

During hospitalization, he was submitted to analytical and imaging studies that allowed the diagnosis of L3-L4 spondylodiscitis. The microorganism *Salmonella sp. (choleraesuis)* was isolated in two blood cultures so empiric antibiotic therapy with ciprofloxacin was maintained (according to the antibiogram). He was reassessed imaging-wise with lumbosacral spine MRI 5 weeks after the start of antibiotic therapy, which demonstrated a significant improvement. After 6 weeks, the patient was discharged from hospitalization to a rehabilitation unit. After two months, he was able to do his daily activities without any restriction.

Infectious spondylodiscitis constitutes a diagnostic and therapeutic challenge. Classically, systemic *Salmonella* infections are described in immunocompromised patients. This case, in addition to exposing a rare clinical entity, reveals that immunosuppression/exposure to corticosteroids must be managed with special care, particularly in the most vulnerable individuals.

Keywords: *spondylodiscitis, Salmonella, corticosteroids, immunosuppression*

[Abstract:0645]

THORACIC VERTEBRAL OSTEOMYELITIS ASSOCIATED WITH ULCER OF GASTRIC CONDUIT AFTER IVOR-LEWIS OPERATION

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Vertebral osteomyelitis (VOM) can be caused by various pathogens, necessitating accurate pathogen identification and delineation of route of infection for effective treatment. We report a unique case of thoracic VOM caused by ulcer of gastric conduit that developed after an Ivor-Lewis operation. A 64-year-old woman, 14-years post Ivor-Lewis operation for oesophageal cancer, presented upper back pain for 8 weeks.

She had been treated for gastric ulcer bleeding with endoscopic haemostasis 3 months ago. In computed tomography and spine magnetic resonance imaging, impending spinal cord compression was observed at the T5-T6 level due to VOM and abscess, with a suspected oesophageal fistula. Decompression and spinal fusion were performed for microbiological diagnosis and therapeutic intervention. Despite suspicions from imaging, oesophagography and endoscopy did not confirm fistula.

Culture of the bone specimen revealed carbapenemase-producing *K. pneumoniae*, suggestive of a gastrointestinal tract origin. Tigecycline, amikacin, and meropenem were administered based on susceptibility test. Subsequently, gastrointestinal normal flora such as *S. exigua* and *O. uli* were additionally identified, further supporting the suspicion of VOM originated from gastrointestinal tract. Endoscopy was repeated, and active ulcer was found at the gastric conduit of Ivor-Lewis operation, which was the source of bleeding prior. As the ulcer location matched the affected spine, ulcer healing was prioritized to control the route of infection. She was maintained on lansoprazole with antibiotics. After 2 months, Significant improvement in VOM and ulcer led to her discharge. This rare case of thoracic VOM emphasizes the role of recognizing postoperative anatomical alterations and accurately identifying the route of infection.

Keywords: *vertebral osteomyelitis, Ivor-Lewis operation, gastric ulcer*

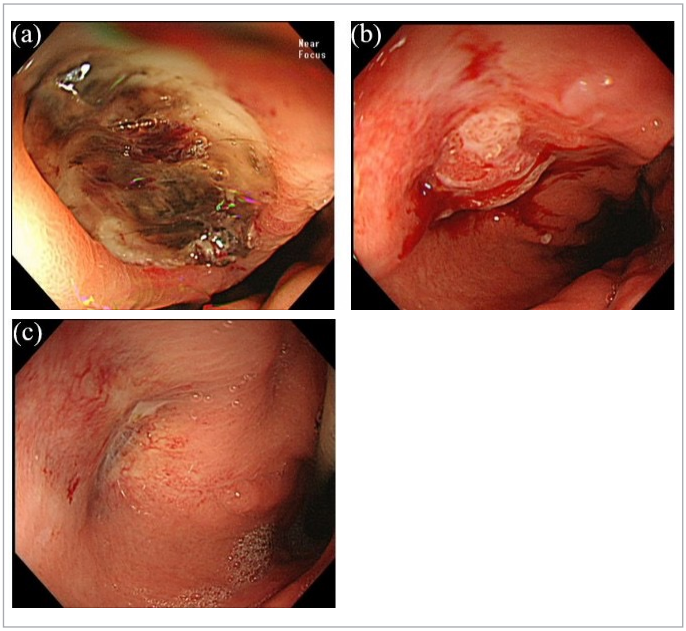

Figure 1. *Chronological change of gastric conduit ulcer.*
(a) Active gastric ulcer bleeding at 3 months before admission. (b) At initiation of lansoprazole twice daily treatment. (c) Healed ulcer after 2 months of lansoprazole treatment

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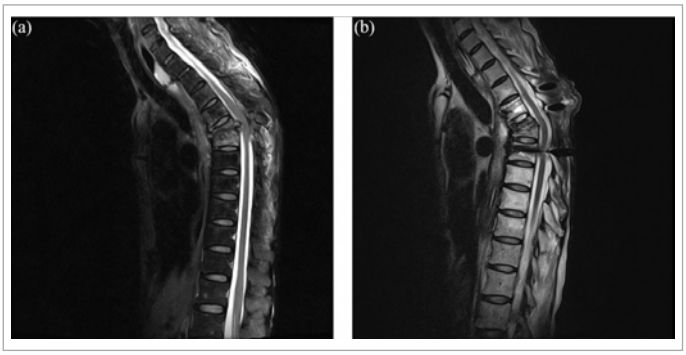

Figure 2. *Magnetic resonance image (MRI) of thoracic vertebral osteomyelitis.*
(a) T5-T6 VOM and epidural abscess, impending cord compression on T-spine MRI. (b) Improved VOM and instability after 2 months of antibiotics, lansoprazole treatment and T5 decompression, T4-6-7 posterior spinal fusion

[Abstract:0699]

HANSEN'S DISEASE: POLYMERASE CHAIN REACTION AS A DIAGNOSTIC TOOL OF AN ANCIENT DISEASE

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Introduction: Hansen's disease is a chronic infectious disease, caused by *Mycobacterium leprae*, which affects both skin and peripheral nerves. In spite of all the efforts, it remains to be a significant public health problem, carrying a strong stigma, poor quality of life and low self-esteem.

Case Report: A 64-year-old female, housekeeper of Brazilian nationality, living in Portugal for the last 6 months, presented with generalized myalgias, arthralgias, asthenia and fever a week before her admission to the emergency department (ED). She also referred a 10 kg weight loss in the 6 months previous to the ED admission and mentioned the appearance of skin lesions in the anterior thoracic region which progressed to the cervical region and flanks, associated with localized xerosis and pruritus.

Initial observation: skin lesions in the cervical, anterior thoracic region and flanks. Laboratory: microcytic hypochromic anaemia, thrombocytosis, hyperferritinemia and elevated inflammatory parameters. She was admitted for assessment of her health condition. Blood cultures: negative. Bone marrow aspirate: no evidence of hemophagocytosis. Study of autoimmune diseases: negative.Electromyography: chronic motor, axonal polyneuropathy of mild to moderate severity. Skin biopsy: detection by PCR of *Mycobacterium leprae* DNA.

After some days of hospitalization, the patient was considered clinically fit to be discharged, maintaining the following medication for 1 year: rifampin 600 mg, monthly, and dapsone 100 mg, daily.

Conclusions: It is reasonable to conclude that we are still far from Hansen's disease control, which implies better control programmes in the future, to prevent the transmission and reduce its incidence.

Keywords: *Hansen's disease, peripheral neuropathy, skin biopsy, polymerase chain reaction, Mycobacterium leprae*

[Abstract:0713]

EPIDEMIOLOGY AND CLINICAL PROFILES OF *BACTEROIDES FRAGILIS* BACTERAEMIA IN A TERTIARY CARE SETTING IN TURKEY: A FIVE-YEAR REVIEW

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Purpose: The *Bacteroides fragilis* group comprises the most important anaerobic pathogens of human infections. Anaerobic bacteraemia is frequently underestimated due to their intricate nature, presenting challenges in routine laboratory procedures for isolation and identification. This study aims to elucidate the epidemiology and clinical implications of *B. fragilis* bloodstream infections in Turkey.

Methods: We conducted an analysis of a 76-patient cohort spanning from November 2018 to May 2023 in a tertiary care hospital. Each isolate was identified using selective growth media, and a mass spectrometer.

Findings: Nosocomial acquisition (OR: 4.99 (1.3–19.07), p = 0.019) and respiratory origin (OR: 8.19 (1.21–55.35), p = 0.031) independently emerged as risk factors for heightened 30-day mortality, underscoring the imperative for increased vigilance, especially within healthcare settings. Concerns are raised regarding antibiotic resistance profiles, particularly about traditionally efficacious antibiotics such as clindamycin and ampicillin Although carbapenem resistance was infrequent, its presence underscores the evolving landscape of antibiotic susceptibility in *B. fragilis*. Metronidazole maintains a favourable susceptibility profile, positioning it as a reliable choice. Despite a relatively modest sample size, this study stands as the first comprehensive survey solely dedicated to *B. fragilis* bacteraemia in the literature.

Conclusions: The study highlights a considerable mortality rate associated with *B. fragilis* bacteraemia with prolonged hospitalization. The study contributes valuable insights into *B. fragilis* infections, early recognition of anaerobic bacteraemia, aiding clinicians in making informed decisions, and administering appropriate antimicrobials, especially in empirical treatments where *B. fragilis* coverage is crucial, such as in intra-abdominal infections.

 DOI: 10.12890/2024_V11Sup1

Keywords: *anaerobic bacteria, Bacteroides fragilis, antimicrobial resistance, epidemiology*

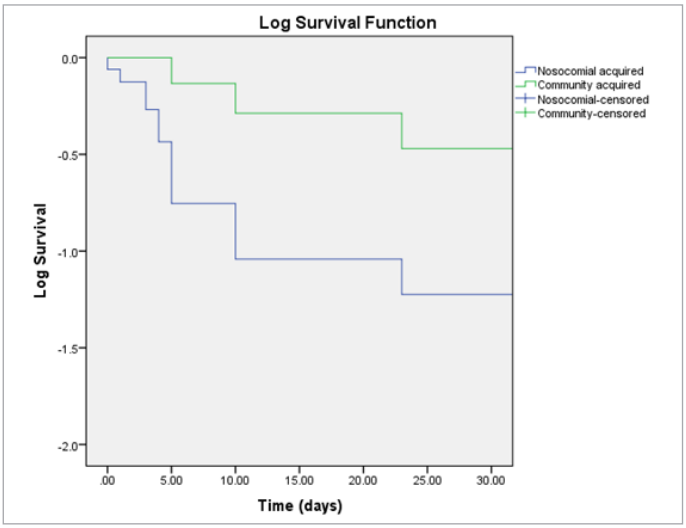

Figure 1. *Kaplan-Meier curves for the 30-day survival according to the acquisition (nosocomial vs. community-acquired).*

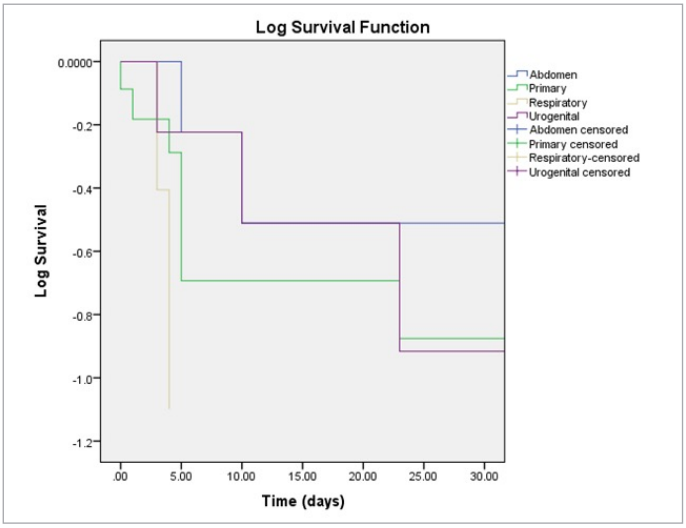

Figure 2. *Kaplan-Meier curves for the 30-day survival according to the primary source of bacteraemia.*

	Total (n =76)	Nosocomial (n =43)	Community (n =33)	p-value for univariate comparison
Male, n (%)	34 (44.7%)	20 (46.5%)	14 (42.4%)	0.72
Age, mean (SD), years	57.8 (21.4)	59.6 (21.4)	55.5 (21.5)	0.41
Charlson score, median (IQR)	4.5 (2-7)	6 (3-7)	3 (1-6.5)	0.097
Septic Shock, n (%)	30 (39.5%)	21 (48.8%)	9 (27.3%)	0.057
ICU, n (%)	27 (35.5%)	20 (46.5%)	7 (21.2%)	0.022
Origin of bacteraemia, abdominal, n (%)	27 (35.5%)	17 (39.5%)	10 (30.3%)	0.186
Adequate empirical antibiotic therapy, n (%)	64 (84.2%)	41 (95.3%)	23 (69.6%)	0.002
Length of stay, median (IQR), days	25.5 (12-51.75)	38 (19-69)	14 (4.5-32.5)	0.001
Mortality at 30 days, n (%)	16 (21.3%)	13 (31%)	3 (9.1%)	0.044

Table 1. *Clinical characteristics of anaerobic bacteraemia (nosocomial vs. community acquired).*

Covariate	Level of the covariate	Univariate analysis HR (95% CI)	p-value	Multivariable Cox model HR (95% CI)	p-value
Gender	Male	1		-	-
	Female	0.72 (0.26-1.95)	0.502	-	-
Age	<65(Ref)	1			
	≥65	0.70 (0.25-1.93)	0.469	0.81 (0.19-3.47)	0.781
Charlson Score (CCI)	CCI <4 (Ref)	1			
	CCI≥4	0.58 (0.16-2.05)	0.399	0.57 (0.10-3.04)	0.517
Acquisition of bacteraemia	Community (Ref)	1			
	Nosocomial	3.21 (0.91-11.37)	0.044	4.99 (1.3-19.07)	0.019
Surgery within past 30 days	No (Ref)	1			
	Yes	0.65 (0.21-2.04)	0.466	-	-
Patients admitted in ICU	No (Ref)	1			
	Yes	1.16 (0.37-3.62)	0.779	1.11 (0.29-4.80)	0.807
Septic shock	No (Ref)	1			
	Yes	0.57 (0.13-2.53)	0.440	2.24 (0.43-11.66	0.338
Origin of bacteraemia	Abdominal (Ref)	1	0.272		0.083
	Primary	2.1 (0.44-9.93)	0.347	2.35 (0.49-11.23)	0.281
	Pulmonary	5.6 (0.90-34.80)	0.064	8.19 (1.21-55.35)	0.031
	Urogenital	1.6 (0.27-9.74)	0.594	0.96 (0.15-5.88)	0.966

Table 2. *Factors associated with 30-day mortality in patients with anaerobic bacteraemia: univariate analysis and Cox proportional hazards model.*

Antimicrobial agent	2018	2019	2020	2021	2022	p-value
Metronidazole	0/13 (0%)	0/15 (0%)	0/16 (0%)	0/20 (0%)	0/12 (0%)	0.390
Tigecycline	1/13 (7.7%)	2/15 (13.3%)	0/16 (0%)	1/20 (5%)	0/12 (0%)	<0.001
Piperacillin-tazobactam	4/13 (30.8%)	1/15 (6.7%)	1/16 (6.3%)	2/20 (10%)	1/12 (8.3%)	0.049
Meropenem	3/13 (23.1%)	2/15 (13.3%)	3/16 (18.8%)	2/20 (10%)	0/12 (0%)	0.470
Clindamycin	7/13 (53.8%)	5/15 (33.3%)	4/16 (25%)	9/20 (45%)	1/12 (8.3%)	<0.001
Ampicillin	13/13 (100%)	14/15 (93.3%)	16/16 (100%)	20/20 (100%)	11/12 (91.7%)	0.302

Table 3. *Prevalence of resistance to different antimicrobial agents of Bacteroides fragilis isolates from ABI over 5 years.*

[Abstract:0752]

SINUSITIS UNVEILED: *STREPTOCOCCUS PNEUMONIAE* MENINGITIS – A CLINICAL INSIGHT

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Streptococcus pneumoniae is the most common cause of adult bacterial meningitis. Bacterial meningitis is among the top infectious causes of death worldwide and when not fatal, may result in permanent neurological sequelae.

A 55-year-old woman, with a history of monoclonal gammopathy, chronic lymphocytic leukaemia. Admitted to the Emergency Department presenting with symptoms of headache, vomiting, disorientation and fever (39.4°C tympanic temperature). She was hemodynamically stable. On neurological examination, she appeared drowsy, mute, unable to follow orders and with neck stiffness.

Analytically with a C-reactive protein value of 19.29 mg/dL and leucocytosis (20.7 10^3/µL). Cranioencephalic computed tomography showed no acute changes and inflammatory pansinusopathy at the bilateral maxillary and left frontal levels. A lumbar puncture was performed with clear cerebrospinal fluid (CSF) flowing drop by drop, marked proteinorrachia (155 mg/dL), normal glycorrhachia (52 mg/dL, serum glucose 146 mg/dL).

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Empirically initiated ceftriaxone, assuming a diagnosis of bacterial meningoencephalitis secondary to sinusitis.
Of the remaining tests collected, CSF cytological results: 725 leukocytes with 85% polymorphonuclear and positive urinary antigen testing for *Streptococcus Pneumoniae*. Added treatment with dexamethasone for 4 days. The patient recovered to her usual state, after completing a total of 15 days of antibiotic therapy. Within the spectrum of infectious diseases, *Streptococcus pneumoniae* meningitis stands out a formidable challenge, demanding heightened clinical acumen and swift intervention. We aim to illuminate the crucial linkages between sinus infections and the development of invasive bacterial complications, specifically meningitis.

Keywords: *meningitis, Streptococcus Pneumoniae, cerebrospinal fluid*

[Abstract:0766]

CEFPROZIL-INDUCED RASH IN A PATIENT WITH INFECTIOUS MONONUCLEOSIS

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Purpose: To present the case of a patient with febrile tonsilitis and diffuse maculopapular rash after cefprozil intake.
Methods: A 24-year-old woman was referred to the emergency department due to a diffuse rash. The patient complained of a 7-day long febrile tonsilitis, treated for the last 2 days with cefprozil. She reported no significant medical history. On examination she appeared febrile, with a temperature of 39°C, a diffuse itching rash with erythematous papules and macules on her trunk and extremities, along with pharyngeal inflammation and grey-green tonsillar exudates. Routine laboratory results showed elevated inflammatory markers (WBC: 13,000/μL, PMN: 48%, LYMPH: 36%, CRP: 32 mg/L), thrombocytopenia (PLTs: 130,000/μL), abnormal liver biochemistry with cholestatic profile (SGOT: 669 U/L, SGPT: 205 U/L, γGt: 340 U/L, ALP: 534 U/L, INR: 0.9). Abdominal ultrasound revealed hepatomegaly (cephalocaudal diameter: 16 cm) and splenomegaly (CCD: 15 cm).
Findings: Blood and urine cultures and serologic tests for CMV, HSV, HHV-6, 7, 8, HIV and viral hepatitis were negative. The monospot test was negative. However, the presence of IgM-VCA and the absence of IgG-EBNA antibodies were documented, with a PCR for EBV being positive at 30000 copies/ml. Therefore, the diagnosis of cefprozil-induced rash in a patient with acute EBV infection was established. The patient was treated symptomatically and gradually improved with rash remission and normalization of liver biochemistry after 2 weeks.
Conclusions: This is a virus-mediated reversible, delayed-type hypersensitivity reaction to antibiotics, most commonly, but not restricted, to ampicillin, amoxicillin and azithromycin. This is an unusual case of hypersensitivity reaction to cefprozil in a patient with infectious mononucleosis. Antibiotics should be avoided when EBV infection is suspected.

Keywords: *infectious mononucleosis, cefprozil, maculopapular rash*

[Abstract:0767]

ACUTE HEPATITIS IN AN IMMUNOCOMPROMISED PATIENT: DO NOT FORGET HERPES-SIMPLEX VIRUS REACTIVATION

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Purpose: Herpes-simplex virus infection (HSV) is usually a self-limiting disease, with mild clinical manifestations. However, in immunocompromised patients, HSV infection might present with systemic and life-threatening symptoms. The aim of our study was to describe a rare case of HSV reactivation in an immunocompromised patient with acute hepatitis and multiorgan involvement.
Methods: A 51-year-old man with a history of Crohn's disease on infliximab, was admitted to our clinic, due to 5-days fever and diarrhoea. On clinical examination, he had tongue and palate vesicular lesions and mild hepatomegaly, with no tenderness during abdominal palpation. Laboratory studies showed leukopenia, thrombocytopenia, acute hepatitis and elevated ferritin levels.
Findings: After excluding several causes of acute hepatitis, such as a) viruses (Hepatitis A, B, C, E, Cytomegalovirus, Ebstein-Barr virus, Parvovirus), b) alcoholic hepatitis, and c) autoimmune liver diseases, HSV infection was suspected due to mucosal lesions. Serological testing showed HSV reactivation (HSV IgG and IgM antibodies positivity), while the molecular tests (polymerase chain reaction) of oropharyngeal and serum specimens confirmed the diagnosis of HSV infection. Of interest, computed tomography testing showed colon-wall thickening and bilateral pulmonary ground-glass lesions. Intravenous acyclovir was administrated, with clinical and laboratory improvement. The patient was discharged after 14 days, with a recommendation to receive chronic prophylaxis with acyclovir.
Conclusions: HSV infection should be suspected in immunocompromised patients with acute hepatitis and multisystemic manifestations and should be confirmed with appropriate testing in order to promptly initiate treatment.

Keywords: *Herpes-simplex virus, immunocompromised, acute hepatitis*

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[Abstract:0790]

VIOLACEOUS RASH AND FEVER: A TRUE EMERGENCY

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Case Description: A 21 year old male patient consulted in emergencies for the third time relating fever and violaceous rash with palmo-plantar involvement. He had priorly been diagnosed of allergic rash but had no response to antihistaminics and steroids. In this occasion he also complains about neck stiffness and malaise. Physical examination confirmed neck stiffness, but Kernig and Brudzinsky signs were negative.

Clinical Hypothesis: Bacterial meningitis due to Neisseria Meningitidis infection.

Diagnostic Pathways: Blood tests revealed leucocytosis and increased C Reactive Protein (180 mg/L - normal range <4 mg/L) with normal procalcitonin. A head CT scan and a lumbar puncture were performed (mild pleocytosis with 78% of mononuclear cells). No microorganisms tested positive in the viral-bacterial polymerase chain reaction carried out in cerebrospinal fluid. Dermatologist performed a skin biopsy of the rash, which revealed findings suggestive of erythema multiforme. Autoimmunity tests and a full body CT scan ruled out immunomodulated or paraneoplastic diseases.

Discussion and Learning Points: The erythema multiforme is a classic disease that can mimic different diseases, such as disseminated meningococcal infection. It is usually triggered by infectious diseases: in this case it was probably triggered due to a viral meningitis. Treatment is focused on management of the trigger but sometimes it may be necessary to use systemic steroids (large extension, malaise). Our patient improved without antibiotics or steroids and in a few days was completely asymptomatic.

Keywords: *erythema multiforme, meningitis, rash*

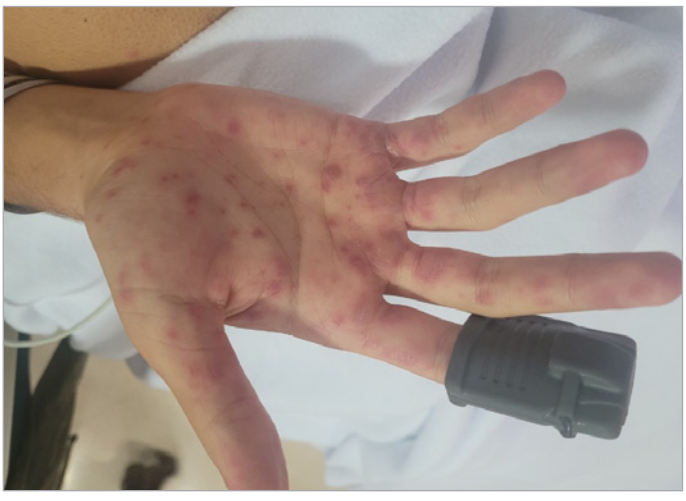

Figure 1. *Plantar affection.*

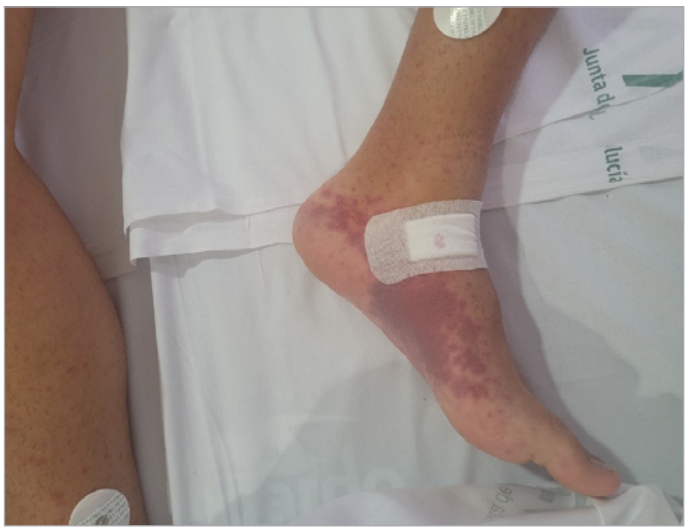

Figure 2. *Plantar affection.*

[Abstract:0794]

EMERGENCE OF *MYROIDES ODORATIMIMUS* IN INTENSIVE CARE UNIT: ANALYSIS OF NINE CASES

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Myroides odoratimimus, a rare opportunistic pathogen, has gained attention due to its increasing prevalence in intensive care units (ICUs). This study presents a retrospective analysis of nine cases of *Myroides odoratimimus* infections in critically ill patients admitted to ICUs. Clinical data, including demographics, comorbidities, clinical presentation, laboratory findings, antimicrobial susceptibility, treatments, Systemic immune-inflammation index (SII) values and systemic inflammation response index (SIRI) values, The Aggregate Index of Systemic Inflammation (AISI) values, Acute Physiology and Chronic Health Evaluation (APACHE II) scores and other outcomes were collected and analyzed.

Identification of *Myroides odoratimimus* was confirmed with matrix assisted laser desorption ionization time of flight mass spectrometer. Notably, antimicrobial susceptibility testing revealed resistance against all antibiotics tested. Three patients were successfully treated with meropenem, and one patient was successfully treated with levofloxacin. This study underscores the clinical significance of *Myroides odoratimimus* infections in ICUs. This study is emphasizing the challenges in diagnosis, treatment strategies and outcomes. Increased awareness and further research are warranted to improve management protocols for this rare opportunistic pathogen in critically ill patients.

Keywords: *Myroides odoratimimus, intensive care units, opportunistic infections*

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[Abstract:0796]

CANDINEG REGISTRY: IS IT WORTH PERFORMING A FUNDOSCOPY EXAMINATION IN ALL PATIENTS AFFECTED BY CANDIDEMIA?

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Purpose: To carry out a descriptive analysis of candidemia in a tertiary hospital and to analyse the incidence of endophthalmitis secondary to candidemia.

Methods: Retrospective observational study, involving all patients diagnosed with candidemia in a tertiary hospital from February 2018 to January 2023. Demographic characteristics, comorbidities, risk factors, diagnosis, treatment, complications and clinical course were collected. The evaluation of endophthalmitis secondary to candida was performed through an ophthalmological examination, fundoscopy. A descriptive statistical analysis of the variables collected was performed and, subsequently, the incidence of endophthalmitis secondary to candidemia and the effectiveness of performing a fundoscopy for its diagnosis were analysed.

Findings: 87 out of the 162 patients diagnosed with candidemia were male (53.7%), with an overall average age of 67 years. The most prevalent comorbidities were: type 2 diabetes mellitus (38.9%), chronic kidney disease (24.1%), neoplasia (34.6%) and immunosuppression (21%). The most frequent risk factors included: parenteral nutrition (25.9%), haemodialysis (28.4%) and catheter carrier: central venous access (65.4%), Port-a-Cath (8.6%) and peripherally inserted central catheter (17.9%). Only 98 fundoscopy examinations were performed (60.5%), requested by: medical specialties (43.87%), surgical specialties (18.36%) and Intensive Care/Anaesthesiology (37.75%). The incidence of endophthalmitis secondary to candidemia was 0 cases.

Conclusions: In our sample, the incidence of candida endophthalmitis was 0 cases, which is in accordance with ophthalmological guidelines that recommend a fundoscopy only in the presence of compatible symptomatology.

Bibliography:

Breazzano MP, Bond JB 3rd, Bearelly S, ed al. American Academy Of Ophthalmology Recommendation on Screening For Endogenous Candida Endophthalmitis. Ophthalmology 2022;129:73-76. DOI:10.1016/j.ophtha.2021.07.015

Keywords: *candidemia, endophthalmitis, ophthalmological examination*

[Abstract:0800]

LEPTOSPIROSIS FOLLOWING A FLOOD DISASTER: A CASE REPORT

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Leptospirosis is a zoonotic disease caused by various subtypes of the *Leptospira*, manifesting with multi-organ involvement. While majority of cases present as a mild, anicteric, self-limiting illness, severe manifestations, such as fever, jaundice, haemorrhage, renal failure, and neurological symptoms, known as Weil's disease, can occur in some cases. We present a case of Weil's disease following flood disaster, managed in our intensive care unit. Leptospirosis is also significant concern for potential outbreak risk.

A 30-year-old male presented with weakness, fatigue, widespread jaundice, and darkened urine. The patient, with no known chronic illnesses or regular medication use, had been stranded in water for approximately 38 hours during a recent flood disaster. Laboratory results at admission revealed elevated liver enzymes, hyperbilirubinemia, elevated inflammatory markers and impaired renal function. Empirical antibiotic treatment with ceftriaxone was initiated but due to worsening general condition, patient was transferred to intensive care unit. Two days later, patient's condition deteriorated further, with significant laboratory abnormalities. Blood samples were sent for viral tests, tumour markers, autoimmune serologies and leptospirosis. MRCP, CT, US were normal. The patient was diagnosed with leptospirosis and doxycycline and cefotaxime were initiated. Plasmapheresis was performed due to elevated bilirubin levels. After 15 days of treatment, patient showed significant improvement and was discharged. During the follow-up examinations, the patient's test results were found to be within normal ranges.

Weil's disease should be considered in patients presenting with jaundice, acute kidney injury, thrombocytopenia, and fever. Early diagnosis and prompt initiation of treatment are crucial for favourable prognosis.

Keywords: *leptospirosis, flood disaster, Weil's disease*

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[Abstract:0805]

A RARE CASE OF HANTAVIRUS INFECTION PRESENTED WITH BILATERAL PULMONARY INFILTRATES, NORMAL C-REACTIVE PROTEIN AND CREATINE KINASE LEVELS, AND RESPONDED TO STEROID TREATMENT

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Purpose: In this article, we aim to present a rare presentation, clinical course, and treatment of Hantavirus infection.

Methods: We present a case report.

Findings: A 55-year-old male patient applied to our hospital complaining of shortness of breath. He was admitted to the pulmonary diseases ward with a diagnosis of pneumonia upon the presentation of bilateral upper pulmonary infiltrates in his chest computed tomography. He was consulted to the internal medicine clinic for an elevation in his liver and kidney function tests. Afterward, the patient was transferred to the internal medicine clinic for further examination. Hantavirus, leptospirosis, toxoplasmosis, CMV infection, and generalized vasculitis were among the differential diagnoses for the findings. We consulted the patient to the Infectious Diseases department, and it was stated that "Hantavirus infection was not considered since there is no c-reactive protein and creatine kinase elevation in the lab test results." While waiting for the results, metabolic acidosis also progressed, and considering the probability of a vasculitic syndrome affecting both renal and liver functions, pulse steroid treatment (1 g/day methylprednisolone IV) was applied. The liver and kidney function tests slowly decreased to normal within five days, and the patient's symptoms were relieved (Figure 1). Arriving test results revealed a positive result for Hantavirus infection. On the 8th day of admission, the patient was discharged with complete recovery.

Conclusions: When Hantavirus infection is suspected, unusual clinical presentations and lab test results should not rule it out. Also, steroid treatment might be used in patients with severe infection.

Keywords: *Hantavirus, creatine kinase, steroid, CRP, infiltration*

Parameters	Day 1	Day 3	Day 5	Day 8
C reactive protein (mg/L) (0-5)	0.6	0.52	0.73	0.32
Creatine kinase (u/L) (0-190)	49	62	55	30
Creatinine (mg/dl) (0.7-1.2)	4.55	4.16	1.53	1.09
Ferritin (µg/l) (30-400)	2000	1630		961
Sedimentation rate (mm/h) (0-20)	37	65		22
Alanine Aminotrasnferase (u/L) (0-41)	315	294	186	93
Aspartate Aminotransferase (u/L) (0-40)	279	226	107	23
pH (7.35-7.45)	7.039	7.27	7.39	7.43
Bicarbonate (22-26)	11.7	16.9	24.6	28.2
LDH (u/L) (135-225)	340	291	260	257
Thrombocytes (10^9/L) (150-450)	36	87	173	196
Procalcitonin (ng/ml) (0-0.5)	0.82	0.59	0.13	0.11
Anti nuclear antibody (ANA)	(-)			
Anti-neutrophil cytosplasmic antibody (ANCA)	(-)			
Complement 3 (0.9-1.8)	1.03			
Complement 4 (0.1-0.4)	0.22			
Toxoplasma Ig M	(-)			
CMV Ig M	(-)			
Rubella Ig M	(-)			

Table 1. *Lab parameters of the patient during the clinical course.*

[Abstract:0832]

SHE'S GOT FEVER. WHAT SHOULD I DO?

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Case Presentation: 33-year-old female who developed fever and abdominal pain after a trip to Tanzania. Initially diagnosed with COVID-19 and later with a urinary tract infection, she received levofloxacin. Persistent fever led to hospitalization, revealing polyarticular arthritis and tenosynovitis, along with mesenteric panniculitis in a CT scan. Progressive anaemia, elevated acute-phase reactants, and anti-cyclic citrullinated peptide antibodies were observed, with negative autoimmune markers. Extensive microbiological, serological, and molecular studies ruled out infections. PET-CT showed hypermetabolic mesenteric lymph nodes. Empirical doxycycline treatment, guided by literature, resolved symptoms. During follow-up, she remained asymptomatic, except for mild abdominal discomfort, with no recurrence of fever or synovitis.

Discussion: Fever of unknown origin (FUO) poses a diagnostic challenge, emphasizing the need for accurate orientation. A detailed medical history is crucial. Common etiologist, (Table 1), include tuberculosis, malaria, and abscesses. For travel-related fevers, after excluding malaria and arboviruses, consideration should be given to atypical bacterial infections. While initial empirical treatment is discouraged, in cases of potentially severe infections or life-threatening conditions, empirical treatment is recommended. In persistent FUO with high suspicion of travel-related fever, empirical doxycycline may be considered, given positive responses observed in up to a third of cases.

1.Bosilkovski M, Baymakova M, Dimzova M. Fever of Unknown Origin (FUO): Towards a Uniform Definition and Classification System. Erciyes Med J 2020; 42(2): 121–6.

2.Daniel Camprubí-Ferrer, MD et al. Doxycycline responding illnesses in returning travellers with undifferentiated non-malaria fever: a European multicentre prospective cohort study, Journal of Travel Medicine, Volume 30, Issue 1, January 2023.

Keywords: *fever of unknown origin, travel, doxycyline*

Aetiologies	Frequency
Infections	40%
Neoplasms	10-12%
Systemic Diseases	20%
Other Causes (Pulmonary Embolism, Thyroiditis, Pharmacological...)	5-13%
Without final diagnosis	10-30%

Table 1. *Aetiologies of Fever of Unknown Origin.*

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[Abstract:0839]

ESCHERICHIA COLI AND *KLEBSIELLA* SPP. CUMULATIVE ANTIBIOGRAM RESULTS OF ISOLATES

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A cumulative antibiogram examines the susceptibility results of bacteria at a local or national level at a specific time. It plays an important role in guiding empirical treatment. In our study, we present the cumulative antibiogram of *E. coli* and *K. pneumoniae* isolates between 01.01.2020 and 31.12.2022. The evaluation was made on the basis of urine and non-urinary samples (blood, respiratory, CSF). In our laboratory, fosfomycin sensitivity in urinary *E. coli* isolates is routinely determined by disk diffusion. While the susceptibility of isolates to other antibiotics is studied using disk diffusion, the sensitivity of intensive care patients is determined by an automated system. Quality control of antibiotic susceptibility tests is carried out on a monthly basis in our laboratory. Annual isolate numbers of microorganisms and antibiotic susceptibility distributions are shown in table 1, table 2, and table 3. The susceptibilities of *E. coli* to carbapenem, aminoglycoside, ceftriaxone and fosfomycin were determined to be over 80% in 3 years. In K. pneumoniae, the susceptibility of non-urinary isolates to the tested antibiotics was significantly lower than urine isolates.

Keywords: *cumulative antibiogram, Escherichia coli, Klebsiella pneumoniae*

Antibiotic Disc	E.coli Uriner (%)	E.coli Nonüriner (%)	Antibiotic Disc	*K.pneumoniae* Uriner(%)	*K.pneumoniae* Nonüriner(%)
AN	98.1	94.3	AN	64.2	53,2
GN	81.4	43.2	GN	74.6	57.3
AM	23.7	12.6	AM	4.2	3.2
AMC	55.1	34.6	AMC	35.4	12.7
CRO	95.9	90.9	CRO	74.3	65.2
FEP	83.4	53.8	FEP	68.4	62.2
SXT	58.2	25.5	SXT	63.2	36.6
TZP	89.8	90.3	TZP	82.1	72.3
FOS	95.4	–	FOS	–	–
MEM	98.7	96.2	MEM	92.1	88.5
CIP	63.2	51.5	CIP	75.1	69.3
Total	*n*: 914	n:278	Total	*n*: 313	*n*: 112

Table 1. *Antibiotic susceptibility percentages of E. coli and K. pneumoniae isolates from 2020 (%).*
Non-urine: CSF (Cerebrospinal Fluid), Blood, DTA (Deep tracheal aspirate), Sputum, Wound culture samples AN(Amikasin), GN(Gentamicin), AM(Ampicillin), AMC(Amoxicillin/Clavulanic acid) CRO(Ceftriaxone), FEP(Cefepime), SXT(Trimetoprim/ Sulfamethoxazole), TZP(Piperasilin/Tazobactam), FOS(Fosfomycin) MEM(Meropenem), CIP(Ciprofloxacin).

Antibiotic Disc	E.coli uriner (%)	E.coli non-uriner (%)	Antibiotic Disc	*K.pneumoniae* uriner (%)	*K.pneumoniae* non-uriner (%)
AN	97.3	92.7	AN	65.1	55,2
GN	85.4	53.2	GN	76.6	63.3
AM	29.7	16.4	AM	4.1	3.3
AMC	57.1	33.6	AMC	33.2	11.8
CRO	91.5	88.1	CRO	62.1	50.2
FEP	81.4	54.1	FEP	70.2	61.3
SXT	52.2	26.1	SXT	66.1	46.4
TZP	89.8	90.3	TZP	82.1	72.3
FOS	96.1	–	FOS	–	–
MEM	97.4	95.3	MEM	91.2	87.9
CIP	65.2	54.6	CIP	74.8	67.6
Total	*n*: 873	n:198	Total	*n*: 299	*n*: 125

Table 2. *Antibiotic susceptibility percentages of E. coli and K. pneumoniae isolates for 2021 (%).*
Non-uriner: CSF (Cerebrospinal Fluid), Blood, DTA (Deep tracheal aspirate), Sputum, Wound culture samples AN(Amikacin), GN(Gentamicin), AM(Ampicillin), AMC(Amoxicillin/Clavulanic acid) CRO(Ceftriaxone), FEP(Cefepime), SXT(Trimetoprim/ Sulfamethoxazole), TZP(Piperasilin/Tazobactam), FOS(Fosfomycin) MEM(Meropenem), CIP(Ciprofloxacin).

Antibiotic Disc	E.coli uriner (%)	E.coli non-uriner (%)	Antibiotic Disc	*K.pneumoniae* uriner (%)	*K.pneumoniae* non-uriner (%)
AN	96.8	93.1	AN	61.1	52,4
GN	86.4	52.4	GN	74.2	61.5
AM	30.9	20.4	AM	4.2	3.5
AMC	55.1	30.9	AMC	31.4	12.7
CRO	92.3	90.3	CRO	57.1	62.2
FEP	75.4	50.9	FEP	65.2	57.3
SXT	53.2	30.1	SXT	65.3	44.4
TZP	89.8	90.3	TZP	82.1	72.3
FOS	95.3	–	FOS	–	–
MEM	96.5	93.2	MEM	88.2	85.9
CIP	63.4	53.7	CIP	71.8	65.1
Total	*n*: 1468	n:398	Total	*n*: 419	*n*: 117

Table 3. *Antibiotic susceptibility percentages of E. coli and K. pneumoniae isolates for 2022(%).*
Non-uriner: CSF (Cerebrospinal Fluid), Blood, DTA (Deep tracheal aspirate), Sputum, Wound culture samples AN(Amikacin), GN(Gentamicin), AM(Ampicillin), AMC(Amoxicillin/Clavulanic acid) CRO(Ceftriaxone), FEP(Cefepime), SXT(Trimethoprim/ Sulfamethoxazole), TZP(Piperacillin/Tazobactam), FOS(Fosfomycin) MEM(Meropenem), CIP(Ciprofloxacin).

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[Abstract:0881]

MYOCARDITIS IN A FEMALE ADULT PATIENT COMPLICATING SALMONELLA ENTERITIDIS INFECTION

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Purpose: Myocarditis is an inflammatory disease of the myocardium caused by various infectious and non-infectious conditions. Clinical manifestations vary from subclinical disease to heart failure, arrhythmias and sudden death. Albeit predominantly associated with viruses, myocarditis has been scarcely reported in bacterial infections including Salmonellosis.

Methods: A 44-year-old female patient with anamnesis of thymectomy was admitted to our Department with a 5-day history of fever and watery diarrhoea. Clinical examination was unremarkable and laboratory tests revealed mildly elevated neutrophils, C-reactive protein and erythrocyte sedimentation rate. No electrocardiographic abnormalities were observed upon admission.

Findings: Blood cultures were negative, whereas Salmonella enteritidis was isolated in the stool. On hospital day four, the patient exhibited acute chest pain. Electrocardiogram showed sinus rhythm with inverted T waves (leads III and avF) and hyper acute T waves (leads V3 and V4) as a new finding. Chest X-ray and echocardiogram were normal, but highly sensitive troponin was elevated. After exclusion of coronal artery disease, myocarditis was confirmed in cardiovascular magnetic resonance. Elevated troponin and electrocardiographic abnormalities persisted for several days, but the patient remained stable under supportive fluid treatment. She was discharged on day ten.

Conclusions: Myocarditis is a heterogeneous inflammatory entity with potentially fatal complications. Although unanticipated, salmonellosis can be associated with myocarditis and therefore awareness is required.

References:

1) Cardiovascular complications of Salmonella enteritidis infection. Hibbert et al, Can J Cardiol 2010.

2) Salmonella enteritidis Infection Complicated by Acute Myocarditis: A Case-Report and Review of the Literature. Papamichalis et al, Cardiol Res Pract 2011.

Keywords: salmonella, complicated salmonellosis, myocarditis

[Abstract:0891]

AN INTERNIST'S LOOK AT BACTERAEMIA

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Summary: Bacteraemia comprises a set of clinical syndromes caused by a variety of infectious agents with clinical and therapeutic implications. In addition to the impact on the infected patient, the presence of infection in the bloodstream has important implications regarding to exposure to antibiotics and risk of creating multidrug-resistant strains.

Purpose: The objective of our study was to evaluate and characterize all patients admitted in our hospital with a diagnosis of bacteraemia.

Methods: Retrospective study including all patients admitted to our hospital within a 2-year period diagnosed with bacteraemia. Clinical data was obtained from the patients' clinical records.

Findings: We obtained a total of 71 patients (36 females and 35 males) with an average age of 72 years. The average length of stay was 75 days. The vast majority of our patients were admitted to the Internal Medicine ward (84.5%), followed by the Orthopaedics, Intensive Care and General Surgery wards. Urinary tract infections were the more prevalent (42.2%), followed by abdominal and respiratory infections. We also highlight that of all the agents identified, only 12 were multidrug-resistant agents.

Conclusions: Bacteraemia reflects the severity of an infectious process and are associated with greater morbimortality. The characterization of these patients is fundamental in their management, with particular emphasis in the identification of agents with a high risk of multidrug resistance. Despite the challenge of bloodstream infections, it's in our hands to combat them. It is therefore crucial to adapt empirical antibiotic therapy with stewardship and subsequent adjustment depending on the microbiological results.

Keywords: antibiotics, bacteraemia, multidrug-resistant

[Abstract:0915]

OVARIAN TUBERCULOSIS WITH PSEUDO-TUMORAL PRESENTATION: A CASE REPORT

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Introduction: Ovarian tuberculosis is a rare manifestation in its pseudo tumoral form it can mimic neoplastic pathology due to its clinically radiologically, and biologically non-specific features.

Observation: We present the case of 59-year-old patient with hypertension, ischemic heart disease. consulting for a clinical picture combining inflammatory ascites (exudative yellow fluid,

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benign lymphocytic cytology, positive Adenosine Deaminase), without peritoneal thickening or peripheral tumoral syndrome. Signs of tuberculinic impregnation were present (asthenia, anorexia, weight loss, moderate fever with night sweats). Inflammatory syndrome with normocytic normochromic anaemia on laboratory tests. The extension assessment revealed nonspecific mesenteric lymph nodes. Pelvic MRI revealed a suspicious right ovarian tissue formation. A very high level of tumour markers (Ca 125 at 30 times the norms). The etiological investigation revealed a tuberculous ovarian pseudotumor, at an unusual site, after ruling out malignant ovarian neoplasia by histology (tuberculoid granulomatous lesion without caseous necrosis in a fibro-fatty location). The patient was placed on antitubercular chemotherapy, consisting of a two-month course of the rifampicin, isoniazid, and pyrazinamide combination, followed by four months of the rifampicin and isoniazid combination. The treatment was well-tolerated with no reported side effects. The patient showed a favourable evolution with complete resolution of ascites and the ovarian mass at the end of the treatment.

Conclusions: This case underscores the importance of considering tuberculosis in the differential diagnosis of an ovarian masse especially in the absence of specific symptoms and inconclusive radiological findings. tuberculosis is highly prevalent worldwide, early recognition and antitubercular therapy are crucial for achieving favourable outcomes.

Keywords: *ovarian, tuberculosis, rare, pseudotumoral*

[Abstract:0922]

WHIPPLE´S DISEASE THROUGHOUT HISTORY AND NEW PARADIGMS: A SERIES OF CASES

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The study aims to describe multiple cases of Whipple's Disease (WD) and review the available literature.

Four clinical cases are presented to highlight the diversity of clinical manifestations and the challenge of diagnosis.

The first case is a 63-year-old male with chronic lower back pain, fever, diarrhoea, a 20 kg weight loss in one year, and findings compatible with WD in intestinal biopsy. The second case, a 41-year-old male with a history of polyarthralgia, presents a two-month history of diarrhoea and PAS-positive macrophages in duodenal biopsy compatible with WD. The third case is a 35-year-old woman with non-cirrhotic portal hypertension, experiencing abdominal pain and polyarthralgia, with a lymphoplasmacytic infiltrate in colonic biopsies indicative of WD. The last case is a 64-year-old male with migratory polyarthralgia and erosive duodenitis, confirming WD in duodenal biopsy but central nervous infection excluded in the lumbar punction.

WD diagnosis supposes a big challenge due to its low prevalence and diverse clinical manifestations. The responsible bacterium is *Tropheryma whipplei*, and the disease is confirmed through duodenal biopsy and lumbar puncture to assess nervous system involvement. However, less invasive methods for diagnosis and monitoring are currently under investigation. Treatment involves an initial phase of intravenous antibiotic, typically with ceftriaxone, followed by an oral suppressive phase, preferably with doxycycline and hydroxychloroquine. The traditionally invasive follow-up is being debated, considering new techniques such as PCR in urine and PET-CT.

The presented cases illustrate this complexity and emphasize the evolution in their management.

Keywords: *Whipple's disease, arthralgia, weight loss, macrophages*

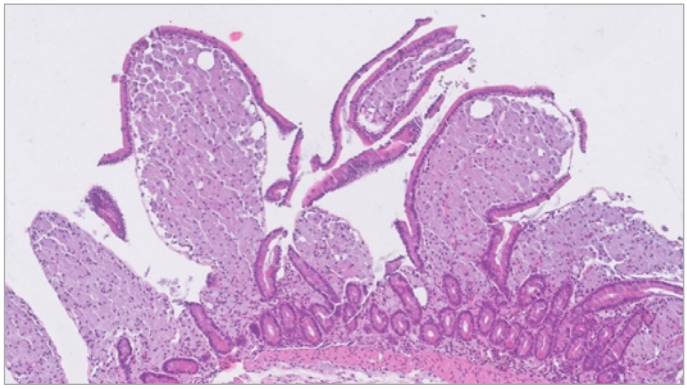

Figure 1. *Haematoxylin-eosin 10x. Duodenal mucosa fragment with massive infiltration of the lamina propria of the villi by foamy macrophages.*

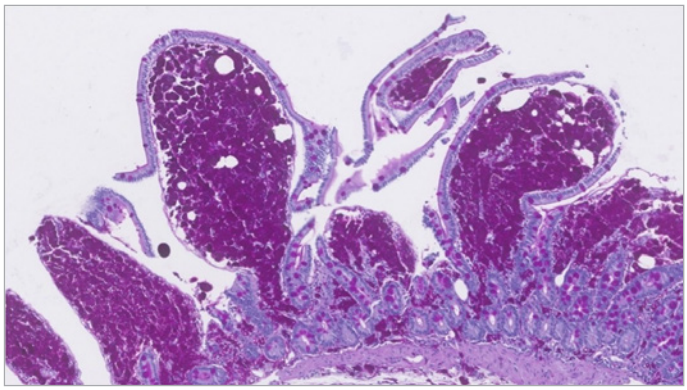

Figure 2. *PAS 10x. The content of the duodenal macrophages is intensely positive with the PAS technique. The histological image is characteristic of infection by the bacterium Tropheryma whipplei.*

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[Abstract:0926]

CEREBRAL VENOUS THROMBOSIS ASSOCIATED WITH HIV INFECTION: REPORT OF A CASE

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HIV infection, known as an associated factor in thromboembolism, is found with an incidence 10 times higher in HIV-positive patients compared to the general population. Apart from the prothrombotic state due to HIV, several intertwined mechanisms (the virus, antiretroviral treatment, accelerated aging) have emerged as hypotheses for VTE

A 29-yo man presented with continuous, throbbing, worsening headaches for 3 days. The headaches were generalized, associated with vomiting, photophobia, dizziness and diplopia. There was no history of seizure, limb weakness or paraesthesia. He denied any history of trauma, fever or loss of consciousness.

His medical history was significant for HIV infection and pulmonary TBC over the past 10 years. He was under unspecified treatment which he stopped three weeks before his admission. There was no family history. On examination, patient with pain, fever at 39°C. The GCS was 15 with reflective intermediate pupils, meningeal syndrome, no neurological deficit. blood tests normal, particularly no biological inflammatory syndrome. A contrast-enhanced CT scan and additional brain MRI showed cerebral venous thrombosis of the right lateral sinus. The patient was placed on low molecular weight heparin then on oral Sintrom. After 9 days of hospitalization, clinical improvement was marked with a clear reduction in headaches.

HIV infection is associated with an increased risk of thromboembolism. CVT is common and should be considered as a differential diagnosis in HIV-positive patients presenting with neurological symptoms. Although clinical diagnosis of CVT is challenging, treatment is often rewarding for most patients.

Keywords: *HIV, cerebral, thrombosis*

[Abstract:0964]

HEPATITIS, METASTASIS, SECONDARY SYPHILIS OR BORRELIOSIS. THE IMPORTANCE OF DIFFERENTIAL DIAGNOSIS

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A 48-year-old patient, a smoker and drinker, presented with jaundice of the skin and mucous membranes, pruritus and choluria lasting 48-72 hours. Weight loss of about 4-5 kg in the last 2 months.

Laboratory Results: Hyperbilirubinemia (7.20 mg/dL), mainly direct, elevation of transaminases (GGT 1055 U/L, GOT 160, GPT 210 U/L, alkaline phosphatase 2018 U/L, thrombocytosis and elevation of Ca 19.9.

Physical Examination: Mucocutaneous jaundice, ulcerated lesion on the first finger of the right hand for one month and roseola in the plantar area of the feet and trunk.

Normal abdominopelvic CT scan, multiple nodules appear at the lung bases, which is why it is included in our differential diagnosis: benign nodules in relation to septic thromboembolism and metastatic nodular lesions (with possible primary in testicle, kidney, melanoma, rectum, etc.).

Autoimmunity study, serologies (HIV, HCV, HBV, HAV, CMV, EBV) *Coxiella burnetti*, *Bartonella henselae* and *Bartonella quintana*, negative. Anodyne gastroscopy and colonoscopy. Normal bronchoscopy and bronchoalveolar lavage. Finally, positive in syphilis (TPHA and RPR), in IgG against *Toxoplasma gondii* and an indeterminate result in IgG against *Borrelia burgdorferi*, so we need Western Blot and ELISA, finally resulting negative. We treated with penicillin, resolving jaundice, ulcerated lesion on the first finger and the truncal and plantar rash, blood tests normalized transaminases and bilirubin. The lung nodules disappeared too.

Conclusions: Secondary syphilis with acute hepatitis as the main manifestation, diffuse pulmonary and dermal involvement (*Syphilitic roseola*). The ulcerated lesion resolved after treatment with penicillin, compatible with *Syphilitic chancre*.

Keywords: *secondary syphilis, lung nodules, borrelia, hepatitis, jaundice*

[Abstract:0967]

METHICILLIN-SENSIBLE *STAPHYLOCOCCUS AUREUS* BACTERIEMIA VERSUS METHICILLIN-RESISTANT *STAPHYLOCOCCUS AUREUS* BACTERAEMIA: A COMPARATIVE ANALYSIS OF COMORBIDITY

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Objectives: Analyse the differences in comorbidity and mortality of bacteraemia caused by methicillin-sensitive *S. aureus* (MSSA) and methicillin-resistant *S. aureus* (MRSA). Other descriptive variables are analysed.

Materials and Methods: This retrospective cohort study included hospitalized adult patients with positive blood cultures for *S. aureus* for one year. Variables including sex, age, Charlson comorbidity index and other clinical data, were collected.

Results: 136 cases were included (84% MSSA and 16% MRSA). 62% were classified as bacteraemia, 10.7% as thrombophlebitis, 8.4% as endocarditis and 6.9% as sepsis. 66.9% of patients were men. Mean age was 69 (SD 16.3). Regarding differences in

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mortality, a non-significant trend (p >0.05) was observed towards higher mortality in the MRSA group (33% at 30 days, 38% at 90 days) compared to MSSA (22.6% at 30 days, 26% at 90 days). The differences in mean age were significant: 68 years in MSSA (SD 16) versus 75 years in MRSA (SD 13). Comorbidity measured by the Charlson index is higher in MRSA bacteraemia (mean score of 4.62) compared to MSSA (3.06) [p value < 0.05]. Regarding the Charlson Index variables, univariate analysis only shows association between dementia and stroke and a higher 90-day mortality [p<0.05].

Conclusions: In our study, a higher comorbidity index and older age were associated with a higher risk of MRSA bacteraemia.

Mortality was higher in the MRSA bacteraemia group, although not significantly so. The assessment of comorbidity is an important aspect when predicting the outcome in these patients.

Keywords: *Staphylococcus aureus, bacteriemia, comorbidity, mortality*

[Abstract:0982]

BACK PAIN AND PROGRESSIVE LIMITATION OF WALKING. NOT EVERYTHING IS WHAT IT SEEMS

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Independent 86-year-old woman, with a history of mild SARS-CoV-2 three months ago. She was brought in due to progressive difficulty in walking after intense back pain for 10 weeks, without previous trauma, making standing impossible the last week. Her examination revealed strength in 2/5 lower limbs, abolished distal reflexes, hypoesthesia in the feet and hands, inability to stand, and dysphagia to liquids. Skull/dorsal CT without findings. Admission is decided. Cranial/cervical/dorsal MRI, complete analysis, serology, hepatotropic viruses, autoimmunity, protein electrophoresis, HbA1, TSH, B12, B1, B6, B9, tumour markers, normal. Due to history of SARS-CoV-2 3 months ago, LP was performed for suspected chronic inflammatory demyelinating polyneuropathy (CIPD), with concordant findings (albumin-cytological dissociation, 1 leukocyte, total protein 73.4 mg/dL, albumin >349 mg /dL and CSF/plasma index >9.44 mg/g. BOC negative). Treatment with immunoglobulins is started. At discharge, improvement in strength in MMII (4/5), improvement in sensitivity alterations and resolution of dysphagia. At no time was there any evidence of respiratory failure. Assessed for rehabilitation, she begins joint physical therapy. In review after three months, resolution of the symptoms.

CIPD is an acquired peripheral neuropathy with proximal and distal motor involvement, accompanied by sensory deficit and global areflexia, of autoimmune cause, which evolves in a period >8 weeks, established by consensus, to separate this entity from others with an acute course such as Guillain Barre syndrome. It is rare, with a prevalence of 1 to 9 cases/100,000 inhabitants, establishing itself as the most common treatable chronic polyneuropathy, mainly in men between 48-60 years.

Keywords: *SARS-CoV-2, chronic inflammatory demyelinating polyneuropathy, infection*

[Abstract:0983]

LIMBIC ENCEPHALITIS: REPORT OF A CASE

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Limbic encephalitis is an inflammatory condition of the large limbic lobe or sometimes limited to lesions of the hippocampus or even extra limbic. It manifests itself mainly by the sudden appearance of short-term memory disorders, cognitive disorders with alteration of the non-specific neurological state.

We report the case of Mrs. MH aged 63, followed in psychiatry under lexomil 6 1 tab/day and risperdol 1 tab/day, consulted for agitation for 3 days in the face of the alteration of the neurological state and the appearance of convulsive seizure she was taken to the emergency room. The clinical examination on admission revealed an afebrile, comatose patient with a GSC=07/15 E=2, V=2, M=3), reflective intermediate pupils, osteotendinous reflexes abolished, no signs of localization, no signs of meningeal syndrome.

She had snoring in both lung fields with a SPO_2 of 83%, a PAO_2 of 52mmHg and a PCO_2 of 45.She was hemodynamically stable. ECG was without abnormality with a GAD of 1.89 g/l. The patient was intubated and placed on mechanical ventilation. Biology, toxicological assessment and brain scan were without abnormality; lumbar puncture showed hyperprotein at 0.63 g/l with normal cellularity. Encephalitis was not eliminated, the patient was put on: cefotaxime, ampicillin gentamicin and aciclovir at a meningeal dose. Brain MRI: abnormality of the right thalamus, uncus, hippocampus and parahippocampus signal in T2 hypersignal, T1 isosignal, diffusion isosignal, not enhanced after gadolinium injection, suggestive of limbic encephalitis. Thoraco-abdomino-pelvic scan: normal, the herpes and COVID-19 PCRs were negative, unfortunately the search for anti-NMDA antibodies was not possible.

The development was unfavourable; failure to wake up after several attempts to stop sedation, she died on the 21st day of her admission due to septic shock due to multi-resistant acetobacter.

Keywords: *limbic, encephalitis, case*

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[Abstract:0988]

DON'T JUDGE A BOOK BY ITS COVER... SYSTEMIC DISEASE?

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[1] ⚠ The authors did not provide affiliations upon requests from the event organizer

Patient, 43 years old, from Honduras, with no history. Hemicrania and loss of vision in the left eyes began. Normal neurological examination: Ophthalmological examination of the left eye: corneal oedema with endothelial precipitates, Tyndall positive, pupil in non-reactive mydriasis (direct and indirect), increase in intraocular pressure (IOP) 48 mmHg. Treatment with corticosteroids and mannitol was started to control IOP. In the fundus of the eye: focus of pigment superior to papilla with perilesional oedema, focus of retinitis on the upper nasal quadrant and associated vasculitis. Tissue atrophy in the macula. Suspected posterior uveitis with toxoplasmosis as the first option, antibiotics were prescribed with trimethoprim sulfamethoxazole and doses of corticosteroids were increased due to associated vasculitis. In a study of systemic causes of posterior uveitis, we requested cranial angiography with nonspecific punctate calcifications in the basal ganglia without other significant anomalies; Abdominal ultrasound and chest X-ray to study the possibility of disseminated disease, normal. In the analysis, a complete blood count and biochemistry, lipid profile study, thyroid function and glycosylated haemoglobin, which were normal. Serologies (HIV, syphilis, herpes group virus, CMV, etc.), autoimmunity, Rheumatoid Factor, ANA and HLA-B27 Ac and proteinogram were negative. Toxoplasma serology: IgG positive, IgM negative. Cranial MRI with nonspecific calcifications in pale globes striking due to the patient's age. Differential diagnosis includes: Fahr syndrome, connatal TORCH and hyperparathyroidism. No orbital process extension data. Normal PTH and Copper/ceruloplasmin

Conclusions: Chorioretinitis due to toxoplasmosis with secondary anterior uveitis associated with recurrent acquired criteria, establishing nonspecific calcifications as an incidental finding.

Keywords: *uveitis, vasculitis, toxoplasmosis, intracranial calcifications, TORCH*

[Abstract:0997]

TUBERCULOUS PERITONITIS: A CASE OF DIAGNOSTIC DILEMMA

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Introduction: Tuberculosis is the 13th leading cause of death worldwide. Extra-pulmonary tuberculosis accounts for nearly 1/3 of cases with the prevalence of abdominal tuberculosis steadily rising. However, such disease poses a significant diagnostic challenge due to lack of pathognomonic findings.

Case Presentation: 31-year-old, female of Asian origin, United Kingdom resident since the age of 17 was admitted with severe abdominal pain. She has a background of psoriasis, started on adalimumab after tested TB negative. This was stopped 2 years later once she had two positive tuberculosis tests. She was referred for latent tuberculosis treatment. However, before starting treatment, she had multiple hospital attendance for similar presentation for 6 months. She was extensively investigated without any conclusive diagnosis. She never had any respiratory symptoms. During this admission, she had unremarkable clinical examination besides generalized abdominal tenderness and temperature spike. CT Abdomen Pelvis showed ascites with omental caking. Following high CA-125 level, ovarian cancer with carcinomatosis peritonei was considered as the likely diagnosis. Ascitic fluid analysis were unremarkable with negative acid-fast bacilli test. Sequentially, omental biopsy was planned and showed numerous caseating granulomata following which she was treated for tuberculosis peritonitis.

Discussion: Tuberculous peritonitis is difficult to diagnose due to its insidious onset, non-specific symptoms and being a great mimicker to other diseases. Peritoneal tuberculosis, even though is a rare clinical condition in non-endemic countries, maintains a high index of suspicion in patients who present with non-specific abdominal pain, even in the absence of respiratory symptoms, especially in high-risk patients.

Keywords: *tuberculosis, peritoneal tuberculosis, adalimumab, omental caking*

[Abstract:0999]

A CASE OF CRYOGLOBULINEMIC VASCULITIS INDUCED BY ACUTE PARVOVIRUS B19 INFECTION

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Purpose: To present the case of a 60-year-old patient with cryoglobulinaemic vasculitis due to acute Parvovirus B19 infection.

Methods: A 60-year-old male with a medical history of type 2 diabetes mellitus, dyslipidaemia and benign prostatic hyperplasia was admitted due to fever, arthralgia and a palpable purpuric rash. Blood tests revealed thrombocytopenia and increased inflammation markers.

Findings: Computed tomography scans of chest and abdomen exhibited no abnormal findings. Laboratory results revealed high levels of rheumatoid factor, low levels of complement component

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3 and 4 (C3 and C4), whereas cryoglobulins were detected as well. Endocarditis was excluded, while bone marrow biopsy showed no hematologic disorders or malignancy. Anti–cyclic citrullinated peptide, antinuclear and anti-neutrophil cytoplasm antibodies, along with the extractable nuclear antigen screening test were negative. Serologic tests for viral hepatitis, HIV, VZV, EBV, CMV, Coxsakie virus were also negative, whereas IgM antibodies against Parvovirus B19 were detected. The syndrome was considered a cryoglobulinaemic vasculitis related to acute Parvovirus B19 infection. The patient's fever and purpura gradually improved without immunosuppressive treatment.

Conclusions: Systematic symptoms such as fever, palpable purpura and arthralgia are common clinical manifestations of several multisystemic inflammatory syndromes. Parvovirus B19 is a rare cause of cryoglobulinaemic vasculitis. Extra-haematological manifestations consist of skin involvement (palpable purpura), renal involvement, neurologic involvement (mononeuritis) and other symptoms such as myalgia, spleen infarcts and increased values of liver enzymes. Autoimmune diseases, hematologic malignancies and infectious diseases should be included in the differential diagnosis, whenever a multisystemic inflammatory syndrome is present.

Keywords: *Parvovirus B19, cryoglobulinaemic vasculitis, purpura*

[Abstract:1003]

A CASE OF PROLONGED FEVER AND NIGHT SWEATS, ALONG WITH ORGANOMEGALY AND CERVICAL LYMPHADENOPATHY ATTRIBUTED TO PRIMARY CMV INFECTION IN A 48-YEAR-OLD MALE

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Purpose: To present the case of a 48-year-old patient with alarming symptoms due to primary infection from cytomegalovirus.

Methods: A 48-year-old male with a medical history of hypothyroidism was admitted due to fever, night sweats and weight loss (about 6 kg). The symptoms began 2 weeks prior to admittance. Clinical examination revealed hepatosplenomegaly and cervical lymphadenopathy. Lab tests showed increased levels of liver enzymes and inflammation markers.

Findings: CT scans confirmed the clinical findings. Blood and urine cultures were negative. Anti-nuclear, Anti-mitochondrial, Smooth muscle antibodies and the Extractable Nuclear Antigen Screening test were negative. Reactive lymphocytes were detected in a peripheral blood smear. Serologic tests for acute viral hepatitis, HIV, VZV, HSV or EBV infection were negative, whereas IgM-CMV antibodies were detected. A PCR blood test confirmed CMV infection (30,000 copies/ml). The patient's symptoms gradually improved. Liver enzymes and c-reactive protein returned to normal after ten days. The virus could have been transmitted by contact with the urine of his 6-months-old infant.

Conclusions: Prolonged fever, weight loss, lymphadenopathy and night sweats are involved in a broad differential diagnosis. Autoimmune diseases and hematologic malignancies should be taken into account. Acute CMV infection is rare in adults and no special medical treatment is required. However, timely consideration of the diagnosis, can put both the patient and the medical team at ease, despite the occasionally alarming clinical picture. Transmission can occur via sexual/blood/perinatal exposure. It can also be transmitted among family members and children through contact with upper respiratory tract excretions and urine.

Keywords: *CMV infection, hepatosplenomegaly, cervical lymphadenopathy, night sweats*

[Abstract:1021]

WHEN THE CLINICAL HISTORY DOES NOT HELP

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Pancytopenia has several causes, but in adults it is often associated with neoplastic, infectious or nutritional causes. Clinical history is fundamental in this distinction.

A 60-year-old female, widowed for 6 years, with history of hypothyroidism (on levothyroxine), asthma and Ménière's syndrome, was sent to the Emergency Department due to pancytopenia in routine blood tests and weight loss of 16 kg in the last 4 months. She also had alopecia, cervical adenopathies, asthenia and anorexia with approximately 2 years of evolution. No neoplastic risk factors were found and denied high-risk sexual behaviour. The physical examination revealed oral candidiasis and palpable, mobile and non-painful cervical and supraclavicular adenomegalies. In initial blood tests: normochromic normocytic anaemia (haemoglobin 8.1 g/dL); leukopenia (0.91 x10^9/L), with neutropenia (0.46 x10^9/L); thrombocytopenia (36 x10^9/L). Protein electrophoresis without monoclonal peak, but with polyclonal elevation. There had already been an etiological study from the previous year with ultrasound and CT-scan revealing cervical adenopathies without pathological criteria. A biopsy of a cervical lymph node was performed, which showed only a reactive pattern. She was admitted for etiological study, with positive serology for HIV1, with 4477976 copies/ml, CD4 19 cells/µL (9.8%). The presence of iatrogenic hyperthyroidism was also verified (TSH 0.09mIU/L), contributing to weight loss. HIV1 infection with severe immunosuppression, causing pancytopenia was, thus,

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assumed in a patient who had been widowed for 6 years and denied any type of risk behaviour.
Although we must believe what patients tell us, a certain degree of guided distrust can be useful for determining the diagnosis.

Keywords: *pancytopenia, adenopathy, weight loss*

[Abstract:1069]

LUMBAR OSTEOMYELITIS LEADS TO PROSTATE CANCER DIAGNOSIS

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Introduction and Purpose: Spinal osteomyelitis usually occurs as a result of hematogenous spread to one or more vertebrae from a distant site. Risk factors include intravenous drug use, infective endocarditis, degenerative changes in the vertebrae, previous surgery in the area, diabetes mellitus, chronic corticosteroid use, or immunosuppression.
Methods: A 82-year-old patient, a farmer, presented with low back pain and fever up to 38ºC for 10 days. From his personal recollection, the patient was on no medication, had no surgery for any reason, did not suffer from diabetes mellitus, had never used intravenous substances in the past. He reports no recent injury. CT of the spine showed spondylodiscitis lesions at the O4-O5 level and the presence of paravertebral lesions with local abscesses. Fine-needle sections of the lesions were obtained and sent for culture where *Staphylococcus aureus* (MSSA) was isolated. Due to the suspicion of metastatic bone disease, the patient underwent a digital examination where a hard prostate gland was found. A fine needle biopsy was performed and showed Gleason stage 3 prostate adenocarcinoma.
Results: The patient was treated with antibiotics with a total treatment duration of 8 weeks. He was also treated with a prostate adenocarcinoma treatment protocol. During the re-check with the end of the antibiotic treatment, the patient shows a spectacular improvement of symptoms and return of the inflammation markers to normal levels.
Conclusions: Spondylodiscitis can occur in patient without obvious risk factors, but these should always be sought in the context of investigating the aetiology of the disease.

Keywords: *osteomyelitis, prostate cancer, risk factors*

[Abstract:1090]

OUTBREAK OF NECROTISING FASCIITIS/ MYOSITIS DUE TO A GROUP A *STREPTOCOCCUS PYGENES* IN ELDA HOSPITAL: SERIES OF 4 CASES

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Objectives: To describe 4 cases of necrotising skin and soft tissue infection by *Streptococcus pyogenes* group A diagnosed in our centre during April and May 2023.
Methods: Observational, descriptive, retrospective study of clinical case series. A descriptive analysis of the variables described was carried out. The median and interquartile range were calculated as measures of central tendency and dispersion. The rules of good clinical practice and data protection law were followed for this research project, in compliance with article 7 of Organic Law 15/1999.
Results: Of a total of 4 cases with a median age of 51 years (IQR 43.5-66.75), the most frequent location was on the extremities, 3 patients (75%). Two of the patients required admission to the ICU/AED. The median length of hospital stay was 18.5 days (RIQ 4.3.22) and only 1 patient died (25%). Surgical cultures of all 4 patients were positive, with isolation of S. pyogenes, blood cultures were isolated in only 1 of them (25%).
Conclusions: 1. *Streptococcus pyogenes* group A infection can be a serious pathology, with high morbidity and mortality.
2. The time from the onset of symptoms to emergency care may be a risk factor in the patient's evolution.
3. The presence of phlyctens and intense pain should lead us to suspect the presence of necrotising fasciitis.
4. Clinical suspicion in patients who consult with compatible symptoms and therefore early diagnosis are crucial for early antibiotic and surgical treatment and thus improve patient survival.

Keywords: *Streptococcus pyogenes, fasciitis, myositis*

CASES	1	2	3	4	Median: IQR 27-75
Age (years)	48	71	54	42	51; IQR 43.5-66.75
Sex	man	woman	man	man	
Comorbidities	DLP	DLP, DM2, breast cancer	neurofibromatosis	no	
Affected area	left iliacus psoas	LUL	RLL	LUL	
Diagnosis	myositis	Necrotising fasciitis	Necrotising fasciitis	Necrotising fasciitis	
Phlyctena	no	yes	yes	yes	
Interval A (days)	7	1	5	1	3; IQR1- 6.5
M. Contagion	unknown	injury	unknown	unknown	
Interval B (hours)	10	1	24	7	8.5; IQR2.5- 20.5
Surgery (1st, final)	de + scl	de + scl	de+ scl	de + scl, amp	
Evolution	exitus	discharge	discharge	discharge	
Dur. Hospitalisation (days)	0.75	15	22	22	18.5; IQR 4.3-22
SBP < 90 mmHg	yes	yes	no	no	
Temperature > 38.5ºC in emergencies	yes	yes	yes	no	
ICU/AER	yes	no	yes	no	

Table 1. *Characteristics of patients with necrotising fasciitis/ pyomyositis due to Streptococcus pyogenes group A.*
1) Interval A: onset of symptoms to emergency assessment. 2) Interval B: 1st assessment to 1st surgery. De: surgical debridement; scl: surgical cleaning; DLP: dyslipidaemia; DM2: diabetes mellitus 2; LUP: left upper

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limb; RLL: right lower limb; Amp: amputation; ICU: Intensive Care Unit; RCU: Resuscitation Unit; RCU: Resuscitation Unit.

Case	1	2	3	4	Median; IQR 25-75
Bacteria	*S. pyogenes* A	*S. pyogenes* A	*S. pyogenes* A	*S. pyogenes* A	
Leukocytes (/uL)	21800	18500	24700	25400	23250; IQR 19325-25225
Neutrophils (%)	97.8	91.7	95.1	95.8	95.45; IQR 92.55-97.3
Lymphocytes (%)	0.7	2.1	1.6	1.7	1.65; IQR 0.93-2
Platelets (/uL)	368000	118000	327000	199000	263000; IQR 138250-357750
CRP (mg/L)	286	160	429	279	282.5; IQR 189.75-393.25
PCT (ng/mL)	66.9	3.72	5.27	8.31	6.79; RIQ 4.1-52.25
Initial ATB	Ceftriaxona + levofloxacin	piperacillin/tazobactam	amoxicillin/clavulanic acid	amoxicillin/clavulanic acid	
Positives cultures	BC + SC	SC	SC	SC	

Table 2. *Emergency laboratory, microbiology and initial antibiotic data in patients admitted for necrotising myositis/fasciitis due to S. pyogenes group A.*
CRP: c-reactive protein; PCT: procalcitonin; ATB: antibiotic; BC: blood cultures, SC: surgical cultures

[Abstract:1097]

CASE REPORT; TWO SIMILAR CLINICAL PRESENTATIONS OF TWO DIFFERENT TREATMENTS IN VERTEBRAL OSTEOMYELITIS CAUSED BY *BARTONELLA HENSELAE*

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Cat-scratch disease is a bacterial infection caused by *Bartonella henselae*. We report 2 cases of cat-scratch disease who presented with vertebral osteomyelitis.
A 37-year-old male patient who is a truck driver was hospitalized due to septic embolism in the right leg and low back pain. He did not recall any contact with an animal. MRI for low back pain revealed osteomyelitis in the lumbar region. Since no infectious agent was found, biopsy and culture sampling were performed from the lomber-4 vertebral corpus of the patient. In this process, *Bartonella henselae* IgG titer was found to be positive 1/128 in the patient who received meropenem and linezolid treatment. Due to the regression of infection markers in the patient, no antibiotic change was performed, the treatment was completed.
A 70-year-old retired male who had many cats was hospitalized due to fever and elevated inflammatory markers. During the investigation of malignant processes and cause of fever, results of the patient indicated osteomyelitis in the cervical-5 vertebra. While investigating the factors of osteomyelitis, *Bartonella henselae* IgG titer was found to be positive 1/1024. Intravenous treatments were stopped, and oral doxycycline and rifampicin treatments were started.
In the control MRI and examinations of both cases, lesions regressed and serological tests were negative.
In cases of vertebral osteomyelitis, *Bartonella henselae* is a rare reason that should be considered. There is no common consensus for its treatment. We wanted to present two similar clinics of osteomyelitis cases in which success can be achieved with 2 different treatment regimens.

Keywords: *osteomyelitis, Bartonella henselae ,fever*

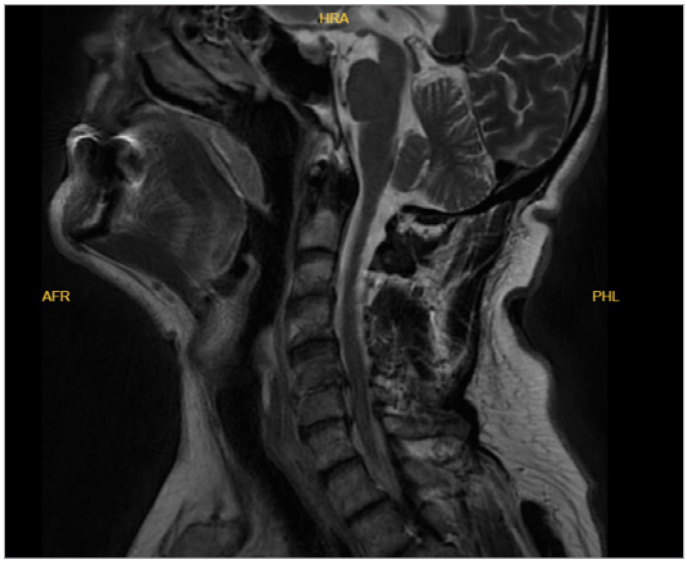

Figure 1. *Cervical MRI with T2 scans.*
70 year old male patient with cervical-5 vertebral osteomyelitis.

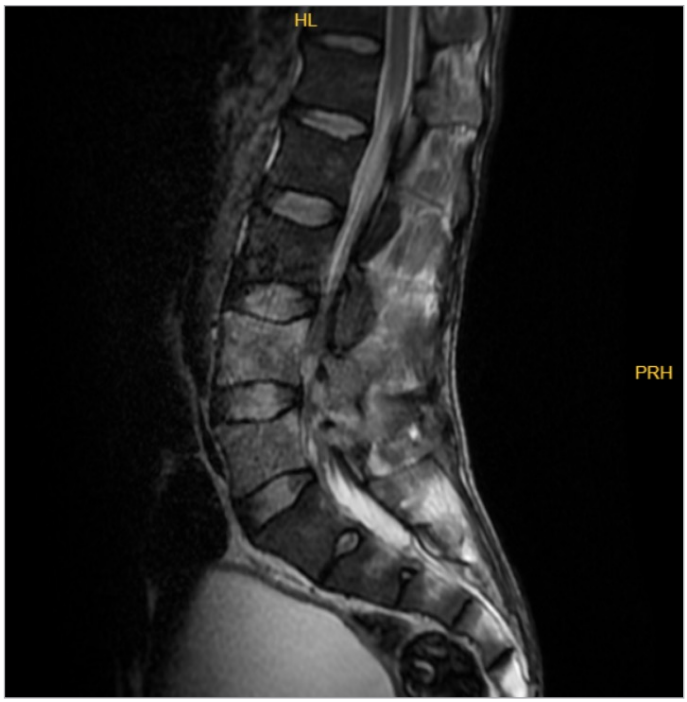

Figure 2. *Thoracal and Lumbar MRI with T2 scans.*
37 year old male patient with lomber-4-5 vertebral osteomyelitis.

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[Abstract:1123]

CONCURRENT PULMONARY AND PERITONEAL TUBERCULOSIS INVOLVEMENT

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A 60-year-old man who followed up with chronic kidney disease, hypertension and diabetes mellitus presented with nausea, vomiting and weakness for 4 days. The baseline creatinine level was 5 mg/dl and the current creatinine level was 7.6 mg/dl. The patient was diagnosed with acute renal failure and started on intermittent haemodialysis.

In follow-up, thorax tomography performed due to complaint of coughing and showed the pattern of Tree in bud in both lungs. Bronchopulmonary lavage was performed and TB PCR was positive. Isoniazid, rifampicin, pyrazinamide and ethambutol were initiated for the treatment.

Abdominal tomography performed to evaluate postrenal pathologies showed intra-abdominal free fluid and suspicious involvement of the peritoneum. Parasynthesis and peritoneal biopsy performed and peritoneal fluid was compatible with nonportal ascites. PET-CT showed lymph nodes that suspicious for malignancy and increased FDG uptake in multiple segments of both lungs, abdominal contamination and peritoneal thickening.

Peritoneal biopsy pathology result was reported as necrotizing granulomatous inflammation. No acid-fast bacilli were detected by EZN, but *Mycobacterium tuberculosis* was grown in peritoneal fluid culture. Furthermore, the patient was evaluated for synchronous peritoneal and pulmonary tuberculosis.

Under classical quadruple anti-tb treatment, hyperbilirubinemia and elevated aminotransferase levels developed and treatment was interrupted. One week after treatment interruption, hypotension, fever, confusion and increased acute phase reactants were observed and the patient was evaluated as septic shock. It was decided to continue anti-tbc treatment as ethambutol, moxifloxacin and cycloserine. As the patient's state of consciousness and respiratory failure worsened under these treatments and excitus occurred.

Keywords: *tuberculosis, peritonitis, tree in bud pattern*

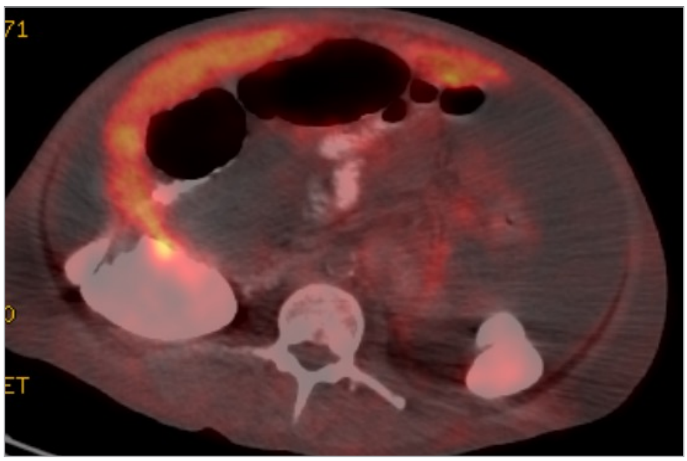

Figure 1. *PET CT. Increased peritoneal FDG involvement.*

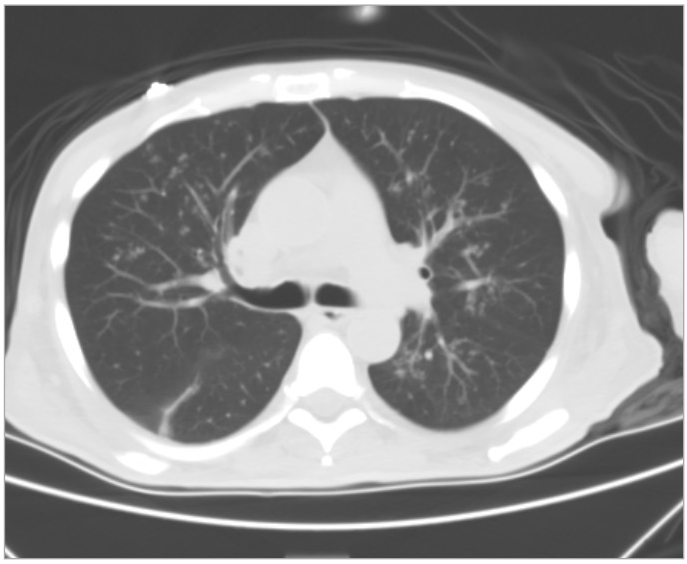

Figure 2. *The Patterns of Tree in Bud.*

[Abstract:1178]

DISSEMINATED VARICELLA IN IMMUNOCOMPROMISED INDIVIDUALS: UNRAVELLING THE COMPLEX CONNECTION TO ACUTE SENSORINEURAL HEARING LOSS

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This case explores the diagnostic challenges associated with disseminated varicella in immunocompromised individuals, focusing on the rare complication of acute sensorineural hearing loss. A 33-year-old female with a complex medical history, including Sjogren's disease, CREST, Raynaud's syndrome, and hypothyroidism, presented with varicella infection. In addition to typical symptoms, the emphasis is on the emergence of acute right-sided hearing loss, revealing a unique interplay between varicella and hearing impairment.

Despite initial acyclovir and prednisone treatment, symptoms persisted, prompting further investigation. A positive sick

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contact history confirmed disseminated varicella, along with an elevated white blood cell count and inflammatory markers, validating a more aggressive treatment strategy: IV ceftriaxone and IV acyclovir. The patient experienced acute worsening right-sided hearing loss, confirmed by ENT evaluation and audiogram. Notwithstanding prednisone initiation, the patient developed a significant deterioration to severe sensorineural hearing loss, requiring a prolonged prednisone treatment regimen.
This case emphasizes the challenges of disseminated varicella in immunocompromised individuals, specifically the atypical complication of acute sensorineural hearing loss. Despite appropriate treatment, setbacks occurred, highlighting the necessity for vigilant monitoring and personalized interventions in such patients, especially concerning auditory complications.

Keywords: *disseminated varicella, immunocompromised, sensorineural hearing loss*

[Abstract:1191]

THE CHALLENGE OF RECURRENT CELLULITIS

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A frequent cause for hospital admissions are infections, but some of these situations reveal themselves to be challenging to deal with.
An 84-year-old man, living in a nursing home, with a history of alcoholic liver cirrhosis, with portal hypertension, and several hospital admissions in the last year: April 2023 with pyelonephritis (completed a cycle of ceftriaxone due to *Escherichia coli* bacteraemia), June for cellulitis of the right lower limb (completed a cycle of meropenem), July with another cellulitis of the right lower limb (completed a cycle of amoxicillin/clavulanate, with a blood culture later isolating *Streptococcus oralis* sensitive only to clindamycin and vancomycin). Visited the Emergency Department in August with yet another cellulitis and was medicated with clindamycin, but blood cultures were collected, isolating *Staphylococcus hominis* resistant to oxacillin and clindamycin, sensitive to vancomycin.
A week later, he was sent back to the Emergency Department after a consultation, with inflammatory signs of the right lower limb and was admitted again. He underwent antibiotic therapy with vancomycin, with initial improvement. However, after that, inflammatory signs of the leg worsened, and inflammatory parameters increased. A CT-scan was performed which showed a large abscess in the leg, not identifying the Achilles tendon. The abscess was drained with isolation of *E. coli* resistant to cefuroxime, but sensitive to ampicillin. Targeted antibiotic therapy was started with favourable evolution.
Infections caused by multidrug-resistant bacteria are an increasing challenge and this case is an example of how difficult it is dealing with some of these situations.

Keywords: *cellulitis, multidrug-resistant bacteria, antibiotics*

[Abstract:1204]

TYPHOID FEVER COMPLICATED OF LIVER DYSFUNCTION

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Purpose: Typhoid fever remains an important aetiology of fever in developing countries. It is an acute infection caused by Salmonella Typhi, especially when it is waterborne or foodborne. We report a case report of a previously healthy 47-year-old male with severe typhoid fever complicated by sepsis with multiple organ dysfunction syndrome.
Summary: The patient was admitted to our hospital with a significant complaint of occipital headache, loss of appetite and nausea. The patient presented with a 3-day history of hyperthermia as well as abdominal pain, watery diarrhoea and weakness. He had recently travelled to Indonesia for holidays and stayed there for 15 days. The H antigen for *Salmonella tylhi* was negative and the O antigen titer was positive 1:80.
Because of the epidemiological context and his symptoms, we assumed the diagnosis of typhoid fever, despite the relatively low titer of the O antigen. He was admitted to the intensive unit due to neurological, cardiovascular, haematological, respiratory, renal and gastrointestinal dysfunctions, with alanine transaminase (ALT) and aspartate transaminase (AST) reaching levels above 3000 IU/L. He completed a total of 7 days of ciprofloxacin and metronidazole and 12 days of ceftriaxone with progressive decrease in inflammatory parameters and progressive improvement in cytocholestasis and hepatic function markers. He was discharged from the hospital after 15 days of hospitalization.
Conclusions: Typhoid fever should be suspected in returned travellers from endemic countries presenting with severe febrile illness.

Keywords: *typhoid fever, febrile syndrome, case report*

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[Abstract:1208]

VARICELLA-ZOSTER MYOCARDITIS - A RARE COMPLICATION

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Introduction: Varicella-zoster virus (VZV) infection primarily impacts children aged one to four and usually resolves on its own. However, VZV reinfections, especially in older individuals and those with compromised immune responses, can lead to various complications, including cardiovascular (CV), respiratory, ophthalmic, cutaneous, and neurological complications. CV complications like myocarditis are rare and there are no reported incidences. The gold- standard for diagnosis is endomyocardial biopsy, albeit infrequently performed. In most cases, clinical suspicion and VZV serology are sufficient for diagnosing VZV myocarditis.

Case Presentation: An eighty-two-year-old woman presented at the Emergency Department with a two-week history of worsening dyspnoea and asthenia. Physical examination revealed bilateral rales, jugular venous distension, and lower limb oedema. Previously hospitalized for herpetic meningoencephalitis, she underwent a course of intravenous acyclovir. An echocardiogram six months earlier indicated mild ventricular septal hypertrophy without other pathological findings. Initially diagnosed with acute heart failure and treated with diuretics, she exhibited a poor response, reaching NT-proBNP values of 444 762 pg/mL, with worsening renal function and needed renal replacement therapy. A subsequent echocardiogram showed severe left ventricular and atrial dilation, global hypocontractility, and multiple valve insufficiencies. She was discharged for monitoring by Internal Medicine, undergoing thrice-weekly haemodialysis.

Discussion: This case illustrates an elderly patient who, following VZV reinfection, experienced rapid progression to heart failure. Despite the absence of an endomyocardial biopsy, the temporal progression and positive serologies strongly support the diagnosis of VZV myocarditis.

Keywords: *Varicella-zoster virus, heart failure, myocarditis*

[Abstract:1210]

MANAGING SYPHILIS IN PEOPLE LIVING WITH HIV

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There are controversial data about syphilis in people living with HV (PLWH) requiring clarification about time to serological response after treatment, serofast definition, and the factors associated.

This study conducted a cohort analysis on 318 syphilis episodes in 173 PLWH in a tertiary hospital between 2016-2022.

Most cases (95%) were in men who have sex with men (MSM), with a mean age of 46 and nadir CD4+ count of 304 cells/mL. Median RPR was 1/32. 58% had latent early-stage syphilis. Only 4 cases (2%) had ocular/otosyphilis or CNS symptoms.

Notably, CD4+ count fell during syphilis episodes, and RPR level at diagnosis was inversely correlated with CD4+ count. The serological nonresponse rate decreased from 26% to 12% within the first year. Serofast status persisted in 45% of cases at low titers. The time to initial serological response was 6.6 months, longer with lower RPR levels, CD4+ nadir count, and pre-syphilis CD4+ count. However, age and nadir CD4+ count influenced the response at 12 months. No difference was observed in RPR, response rate or time to response between first and consecutive syphilis episodes. Neurosyphilis was suspected in 38 cases (22%), with lumbar punctures confirming it in 11 cases. Confirmed neurosyphilis correlated with higher CD8+ and lower CD4/CD8 count. In conclusion, the study sheds light on the time to response after syphilis episodes in PLWH, emphasizing the role of immune status in syphilis presentation and evolution. These findings, contribute to understanding syphilis in the context of HIV and inform clinical management strategies.

Keywords: *syphilis, neurosyphilis, HIV*

[Abstract:1231]

HEALTH ALSO TRAVELS

Marina Cazorla González[1], *Ana Nieto De Pablos*[1], *Genma De Dios Cancelo*[1], *Marina Prieto Dehesa*[1], *Joaquín Salas Coronas*[2]

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[2] Tropical Medicine Unit. Poniente Hospital, El Ejido, Almería, Spain

We present the case of a 40-year-old woman with no relevant history, consisting of fever (38.5ºC) without skin lesions, after a month of leisure travel to Papua New Guinea. She has done activities like trekking, swimming in lakes and eating from street stalls.

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It highlights anaemia, thrombopenia, coagulopathy, mild acute hepatitis and elevation of acute phase reactants, without microbiological isolates. Papua is a malaria-endemic area. Furthermore, our patient hasn't done prophylaxis. That's why we suspected this disease, and we carried out a peripheral blood smear (positive for *P. malariae*). She received Piperaquine tetraphosphate/artenimol for three days with resolution of the fever.

One week later, she presented fever and an erythematous non-pruritic rash on the trunk, associated to absolute eosinophilia, without microbiological isolation. Causes of eosinophilia have been studied unsuccessfully. After ruling out hyperinfestation by Strongyloides, given the activities carried out in fresh water, Katayama fever in relation to schistosomiasis is proposed as the most probable diagnosis. She received high-dose prednisone for 3 days, with normalization of eosinophils, improvement of the rash, and disappearance of fever. Three months later, schistosoma seroconversion was observed. Finally, she has been treated with praziquantel 40 mg/Kg.

Katayama fever is a hypersensitivity reaction that can occur with the onset of egg laying, usually 2-4 weeks after intense exposure. Clinical manifestations are fever, cough, nausea, abdominal pain, general malaise, myalgia, rash and eosinophilia.

This case shows the relevance of following health advice for traveling safe.

Keywords: *eosinophilia, schistosomiasis, katayama fever*

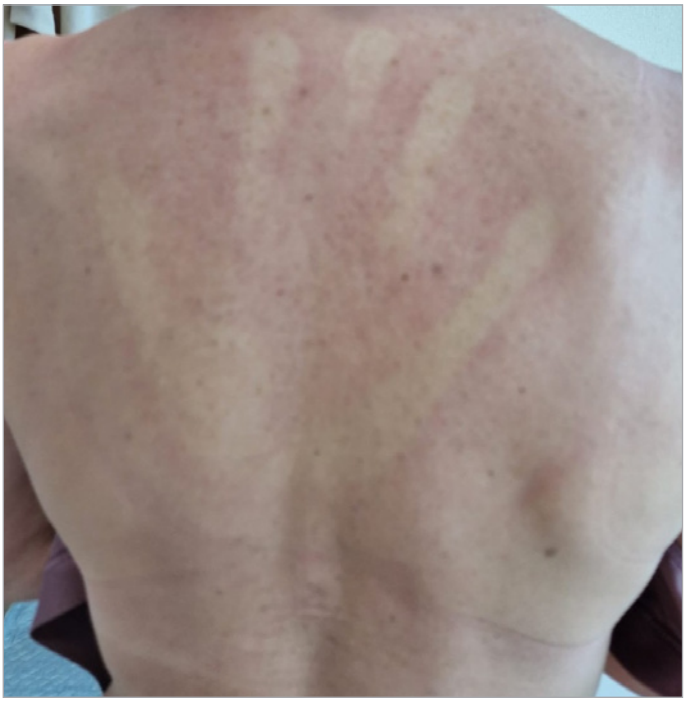

Figure 1. *Erythematous non-pruritic rash on the trunk, associated to absolute eosinophilia.*

[Abstract:1241]

PERSISTENT MONONUCLEOSIDE SYNDROME

Genma De Dios Cancelo, Ana Nieto De Pablos, Marina Cazorla González, María González Fernández, Tamara Gómez Traveso

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A 69-year-old man with no past history of interest, who consulted for constitutional syndrome of 2 months' duration. Initially he started with general malaise, lumbar pain, nausea, vomiting and weight loss of 4 kg for 15 days of evolution, followed by intense asthenia and fever predominantly in the evening and night sweats. No findings of interest were found on examination.

A differential diagnosis between infectious, autoimmune or tumour pathology was suggested.

Initially, blood tests were requested with hemogram, biochemistry, TSH, proteinogram and faecal occult blood, and only slight lymphocytosis of 6.5, glomerular filtration rate of 58 and slight increase of hepatic markers were found. Serology was requested for hepatitis, cytomegalovirus, herpes virus, Epstein-Bar virus and HIV, with positive results for cytomegalovirus IgM and IgG with low avidity, compatible with primary infection. In addition, a CT scan was requested, ruling out underlying tumour pathology in the absence of imaging findings suggestive of malignancy. In view of the persistence of the clinical manifestations, and the patient referred that in the last months he had been living in the countryside, serologies for *Coxiella*, *Rickettsia*, and *Borrelia* were expanded, with negative results. The possibility of celiac disease was also ruled out analytically. The patient's clinical condition persisted with slight improvement for 4 months, during which analytical controls were performed in which only lymphocytes and transaminases remained slightly elevated. Serology for cytomegalovirus remained positive in all of them. The final diagnosis was persistent cytomegalovirus infection. Treatment was symptomatic.

Keywords: *cytomegalovirus, persistent, serology*

[Abstract:1243]

AN UNCOMMON CAUSE OF DEMENTIA

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We present the case of an 85-year-old woman with well-controlled arterial hypertension. Independent for basic activities. She was referred to the emergency room due to inability to walk suddenly. Furthermore, she presented incomprehensible speech, hallucinations and stiffness in the right hand for a month's duration. Fever in the last 24 hours. Laboratory tests revealed mild leucocytosis with neutrophilia and elevated acute phase reactants.

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Given the neurological symptoms, we performed cranial CT that ruled out acute neurovascular syndrome and space occupying injuries. Therefore, we performed lumbar puncture without finding infectious pathology in the central nervous system.
We propose a differential diagnosis with causes of dementia (no vascular alterations, no findings of neoplasia, no vitamin/hormone deficiency). Serologies without evidence of acute infection. The absence of a clear cause of dementia leads us to consider Lewy body dementia (LBD) and Creutzfeldt-Jakob as part of the differential diagnosis. We expanded the study using cranial MRI and electroencephalogram with findings compatible with a probable case of sporadic Creutzfeldt-Jakob. We requested the 14-3-3 protein in CSF with a positive result, supporting the diagnosis. Finally, the patient died.
Prion diseases are neurodegenerative diseases, which have a long incubation period. Three categories are distinguished: sporadic (>90%), genetic and acquired. Rapid cognitive deterioration is characteristic. They usually associate other neuropsychiatric manifestations. It's a rare pathology. Therefore, the case we present, it would be expected that the cognitive deterioration would be due to more frequent causes consistent with age (vascular disorders, nutritional deficiency, Alzheimer's, LBD).

Keywords: *Creutzfeldt-Jakob, dementia, prion*

[Abstract:1258]

NEUROCOGNITIVE IMPAIRMENT IN PEOPLE LIVING WITH HIV AND CHANGES IN ADHERENCE AND COMPLIANCE DURING LONG-TERM FOLLOW-UP

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The prevalence and clinical implications of neurocognitive impairment (NCI) in people living with HIV (PLWHA) remain controversial.
We conducted a study with a cohort of 270 PLWH from 2012 to 2016. NCI was assessed using Trail Making A, Trail Making B, and Digit Symbol tests, and a normalized score by age and gender (NPZ3) was obtained. The Grooved Pegboard (GP) test was also performed on the dominant and non-dominant hand in 77 patients, yielding a normalized NPZ5 score. Adherence to antiretroviral treatment was evaluated at baseline and at two cut-off points at 3 and 6 years.
Correlations were observed between NPZ3 values and educational level (p=0.002), scores on the depression scale (p=0.01), and nadir CD4+ count (p=0.03). In a linear regression analysis, only nadir CD4+ (p=0.04) and educational level (p=0.02) were associated with NPZ3 values. There was also a significant correlation between NPZ3 and NPZ5 (p=0.001), with a high correlation between both adherence measures (survey and delays in medication pickup at the pharmacy).
During a 3-year follow-up, worse adherence according to NPZ3 was observed, both in percentage reported and in delays in pharmacy pickup, worse compliance with visits, and losses during a 6-year follow-up.
Therefore, the conclusions highlight that NCI is associated with immunosuppression levels. Furthermore, patients diagnosed with NCI show poorer clinical and therapeutic adherence during long-term follow-up.

Keywords: *VIH, neurocognitive impairment, therapeutic adherence, immunosuppression*

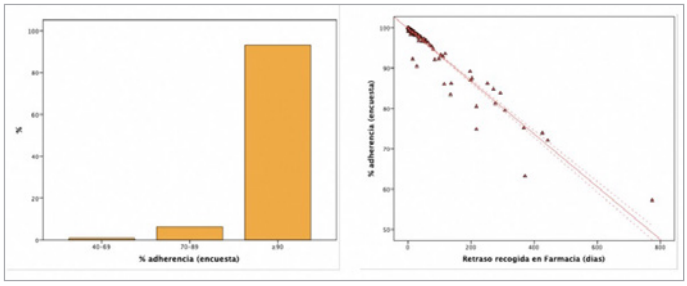

Figure 1. *Adherence measures (survey and delays in medication pickup at the pharmacy).*

[Abstract:1334]

FIRST COMPLICATION LEADS TO HIV/AIDS DIAGNOSIS

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Infection with the human immunodeficiency virus (HIV) progresses through stages: initial, chronic, and advanced (AIDS), leaving the body susceptible to opportunistic infections in the final stage. These can be complex, emphasizing the crucial need for antiretroviral treatment to control the virus and maintain health.
A 58-year-old man presented to the Emergency Department with a complaint of chest pain and dyspnoea. He reported additional symptoms of fever and diarrhoea in the past week. A resident of Angola, he had been previously diagnosed and treated for malaria in the preceding month but admitted to complete non-compliance with the prescribed treatment. On physical examination, he exhibited tachycardia and tachypnoea. Diagnostic tests revealed hypoxemia (pO_2 of 47 mmHg), elevated C-reactive protein, and chest X-ray showing bilateral infiltrates. A repeat malaria test yielded negative results. With a presumed diagnosis of bilateral community-acquired pneumonia, empirical antibiotic therapy was initiated. Due to clinical deterioration, a chest CT scan was performed, revealing diffuse bilateral ground-glass opacities with

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basal consolidations. Multiple serological tests, including HIV and *Campylobacter jejuni*, returned positive, leading to the diagnosis of AIDS (CD4+ T-cell count of 8 cells/mm^3) with multiple opportunistic infections such as Pneumocystis pneumonia and oral and oesophageal candidiasis that subsequently manifested.

This case highlights the need to consider the multiple clinical manifestations of opportunistic infections. Often, these manifestations can resemble other pathological conditions, making the diagnosis more challenging.

The appropriate treatment and antiretroviral therapy (ART) are crucial, contributing significantly to the improvement of quality of life and life expectancy.

Keywords: *HIV/AIDS, complications*

[Abstract:1382]

A RARE INFECTIOUS CAUSE FOR A RAPIDLY PROGRESSIVE DEMENTIA

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A 69-year-old lady came in with complaints of rapid cognitive decline over a period of 3 months. She was fit and well otherwise and had not been on any regular medications. She had left sided hemi-inattention and a left sided hemianopia. MRI showed multifocal space demanding white matter lesions without cortical involvement. Her dementia screening and lumbar puncture was unremarkable and as She was not responding to steroids and seeing clinical and radiological worsening of her disease a brain biopsy was urgently done which showed evidence of Polyoma particles within the oligodendrocytes with JC virus positivity. She had extensive investigations for secondary causes of immunosuppression and there was no cause found. Unfortunately, she deteriorated rapidly and after family discussions she was palliated for best comfort care. As of 2023 only 58 cases have been published about PML in immunocompetent patients. The key learning points from our case is to keep this as a differential in any patient coming in with rapid progressive dementia.

Keywords: *dementia, infectious diseases, neurology*

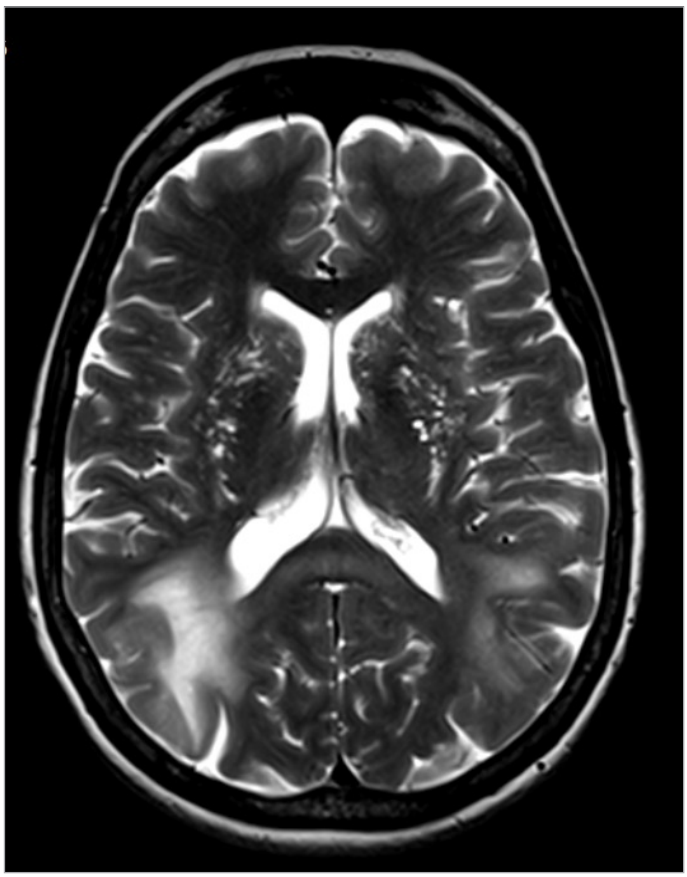

Figure 1. *JCV with extensive white matter changes with involvement of splenium of corpus callosum.*

[Abstract:1384]

RECURRENCE OF CLOSTRIDIOIDES DIFFICILE DIARRHEA IN THE HOSPITAL OF GETAFE, BEFORE AND AFTER APPLYING AN UPDATED PROTOCOL FOR ITS MANAGEMENT

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The incidence of *Clostridioides difficile* diarrhoea continues to increase and an approach to improve the clinical outcome of this infection is needed. The aim of this study was to determine whether the management of this disease by a clinical antimicrobial optimization team (PROA) improved the clinical course of this disease. An intervention study was conducted in a single centre, comparing the rate of recurrence of diarrhoea at 8 weeks after treatment of the infection and, secondarily, the 30-day mortality and cure rate at the end of follow-up. A total of 140 episodes were detected, 39 patients died within 30 days, so recurrence was evaluated in 206 episodes (115 in the pre-PROA group and 91 in the post-PROA group). In the post-PROA group there was a 50% reduction in recurrences, (13) (14.3%) versus (33) (28.7%) in the pre-PROA group, p=0-014). The PROA team intervention was significant (OR= 0.446, 95% CI: 0.208 - 0.958) after adjusting for

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age over 80 years, presence of risk factors for recurrence or being a recurrent case. In the post-PROA group, the cure rate increased by 21% (p= 0.01). A lower early 30-day mortality was observed in the post-intervention group without reaching significance. Our results confirm that the implementation of a clinical management program for *Clostridioides difficile* infection significantly reduces recurrences within 8 weeks after the end of treatment and may reduce the early mortality of the infection.

Keywords: *Clostridioides difficile, stewardship, healthcare-associated infection*

[Abstract:1398]

WERE COVID-19 PNEUMONIA REVENUES THE SAME IN 2021 AS IN 2022? COMPARATIVE STUDY AT DENIA'S HOSPITAL

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[1] ⚠ The authors did not provide affiliations upon requests from the event organizer

Materials and Methods: Retrospective analysis of the complete CMBD-AH (MBDS) register of Denia Hospital from 1st January 2021 to 31st Dec 2022, selecting as cases all those with a principal diagnosis of COVID-19 pneumonia. The variables analysed were described with frequencies and percentages (qualitative), and with median and interquartile range (quantitative). A logistic regression model was constructed to assess the adjusted associations related to mortality, ICU admission and the length of satay during the hospitalisation. Stata_9.1 package was used.

Results: A total of 648 patients were included, 429 admitted in 2021 and 219 in 2022, with a median age of 68.9 years in 2021 and 80 years in 2022. The median length of stay was 7.1 days in 2021 and 6.1 days in 2022. 16.08% of patients required ICU admission in 2021 and 8.68% in 2022. There were 23.08% exitus in 2021 and 16.44% in 2022. Statistically significant results were obtained for comorbidity due to heart failure, dementia, chronic lung disease, kidney disease, diabetes and malignant tumours, all being higher in 2022.

Conclusions: Despite the higher age and comorbidity in 2022, the percentages of hospital admission, mean hospital stay, need for ICU and exitus were lower than in 2021. The reduction in the mentioned ratios was a consequence of the consolidated effect of vaccination, which started in January 2021, the change in the variant from Delta to Omicron with lower morbidity and, also, due to the optimization of treatment in 2022 in conventional hospitalization plants.

Keywords: *COVID-19 pneumonia, treatment*

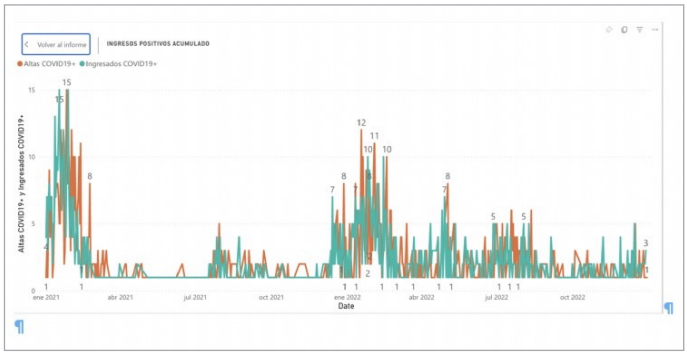

Figure 1. *Daily hospital admission in 2021 and 2022.*

	2021	2022	2021+2022	Statistical significance
Heart attack	14 (3.26%)	10 (4.57%)	24 (3.70%)	Chi-squared, p=0.406
Heart Failure	36 (8.39%)	45 (20.55%)	81 (12.50%)	Chi-squared, p<0.001
Peripheral vascular disease	5 (1.17%)	3 (1.37%)	8 (1.23%)	Fisher Test p=1.000
Cerebrovascular disease	17 (3.96%)	13 (5.94%)	30 (4.63%)	Chi-squared, p=0.258
Dementia	28 (6.53%)	34 (15.53%)	62 (9.57%)	Chi-squared, p<0.001
Rheumatic disease	9 (2.10%)	8 (3.65%)	17 (2.62%)	Chi-squared, p=0.241
Peptic ulcer	1 (0.23%)	0 (0.00%)	1 (0.15%)	Fisher test, p=1.000
Hemiplegia or paraplegia	1 (0.23%)	0 (0.00%)	1 (0.15%)	Fisher test, p=1.000
Liver disease	10 (2.33%)	9 (4.1%)	19 (2.93%)	Fisher test, p=0.300
Chronic lung disease	51 (11.89%)	57 (26.03%)	108 (10.67%)	Chi-squared, p<0.001
Renal disease	45 (10.49%)	36 (16.44%)	81 12.50%	Chi-squared, p=0.030
Diabetes without complications	75 (17.48%)	53 (24.20%)	128 19.75%)	Chi-squared, p=0.009
Diabetes with complications	14 (3.26%)	15 (6.85%)	29 (4.48%)	Chi-squared, p=0.009
Malignant tumors	16 (3.73%)	23 (10.50%)	39 (6.02%)	Fisher test, p=0.002
Charlson Comorbidity Index	0 (0-1)	1 (1-3)	-	Test Mann- Whitney, p< 0.0001
Total of Pneumonias	429	219	648	

Table 1. *Incidence and proportion of comorbidities presented by patients in 2021 and 2022 following the Charlson index.*

	2021	2022	2021+2022	Statistical significance
Number of admissions due to COVID-19 Pneumonia	429 (66.2%)	219 (33.8%)	648 (100%)	Chi-squared, p<0.001
Median age at entry years interquartile range	68.9 años (56.7-79.8)	80 años (69.6 - 87.0)	72.8 años (60.7-82.7)	Test Mann- Whitney, p< 0.0001
Average length of stay days interquartile range	7.1 días (4.9-12.6)	6.1 días (4.4-8.9)	6. 74 días (4.69-11.62)	Test Mann- Whitney, p= 0.0075
Need for ICU	69 (16.08%)	19 (8.68%)	88 (13.58%)	Chi-squared, p=0.009
Exitus	99 (23.08%)	36 (16.44%)	135 (20.83%)	Chi-squared, p=0.049

Table 2. *Comparison of COVID-19 pneumonia characteristics in 2021 and 2022.*

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[Abstract:1401]

A DIFFERENTIAL DIAGNOSIS MARKED BY GLOBALIZATION: CONSTITUTIONAL SYNDROME, LYMPHADENOPATHY, ORGANOMEGALY AND PANCYTOPENIA

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Internal Medicine Service, Infanta Elena Hospital, Huelva, Spain

39-year-old Moroccan male, resident in Spain for 5 years was admitted for pancytopenia, lower oedema and fever. He reported asthenia for 2-3 months, progressive weight loss, dysthermic sensation and night chills without sweating. He presented cachexia with sarcopenia, splenomegaly, inguinal and axillary lymphadenopathy, and hyperpigmented tibial lesions. Pancytopenia, hypoalbuminemia, lengthening of coagulation times with deficiency of factors II, III, IX, XI, XII. Peripheral blood smear showed atypical lymphocytes and red series with moderate anisopoikilocytes and anisothrombia. No amastigotes. Hypertransaminasemia without cholestasis. Positive autoimmunity (ANA 1/160) with negative antiDNA. Abdominal CT scan revealed splenomegaly with mesenteric, axillary, and inguinal lymphadenopathy.

Differential diagnosis of constitutional syndrome with polyadenopathics and splenomegaly was proposed: haematological vs infectious origin (HIV, TB, Leishmania, etc).

Bone marrow biopsy revealed hypercellularity with moderate plasmacytosis of mature appearance and presence of inclusions compatible with Leishmania parasitisation. Confirmed in inguinal lymph node removal. Positive serology for leishmania (1/160).

Visceral leishmaniasis was diagnosed and liposomal amphotericin B was started for seven days. Reviewed subsequently with spectacular evolution.

Leishmaniasis is caused by parasites of the genus Leishmania, transmitted by the sandfly mosquito bite. In our case, the clinic plus serology and pathological anatomy confirmed the diagnosis and, although the species was not obtained, the main suspicion was *L. infantum*, the most common type in Morocco.

Globalization and immigration have a significant impact on Leishmaniasis' epidemiology. People who travel or emigrate from endemic areas can become infected and spread to new places, so it should be part of our differential diagnosis in our health area.

Keywords: *Leishmania, adenopathy, organomegaly, pancytopenia, constitutional syndrome*

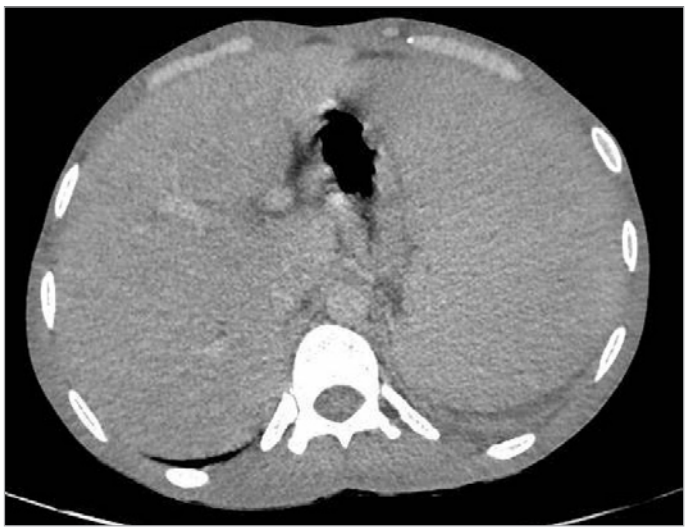

Figure 1. *CT of the abdomen and pelvis with contrast. Massive splenomegaly (25 cm in CC axis).*

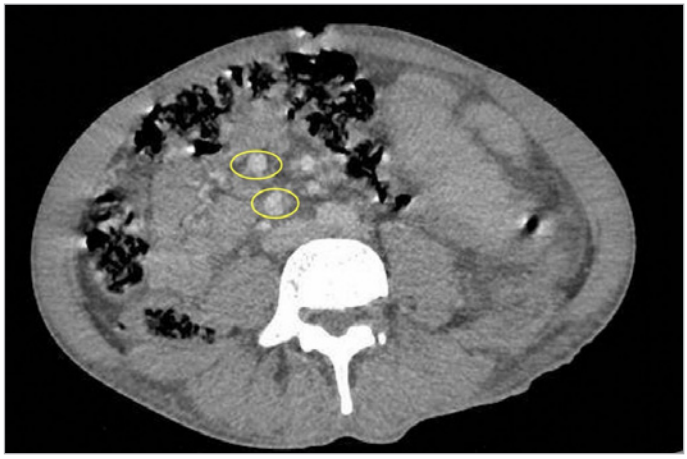

Figure 2. *CT of the abdomen and pelvis with contrast Multiple mesenteric lymphadenopathy.*

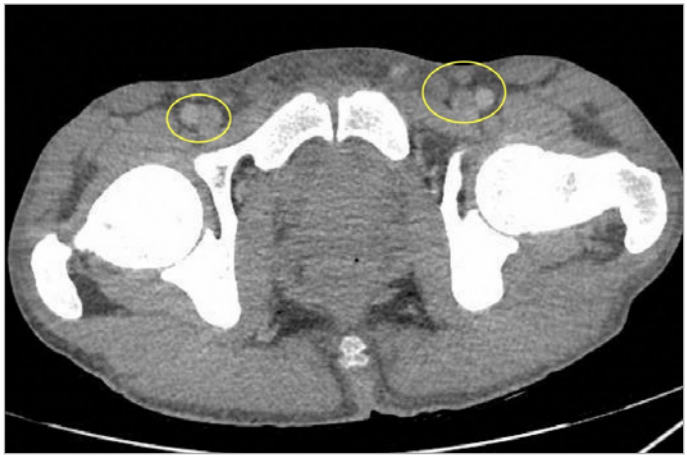

Figure 3. *CT of the abdomen and pelvis with contrast. Inguinal lymphadenopathy.*

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[Abstract:1433]

DEVELOPMENT OF AUTOIMMUNE DISEASES AFTER SARS-COV-2 INFECTION

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[1] ⚠ The authors did not provide affiliations upon requests from the event organizer

We present the case of a 52-year-old non-smoking woman, with a history of ASTHMA, who was hospitalized in January 2021 for a bilateral SARS-CoV-2 pneumonia (Figure 1). After the medical discharge, she presented arthralgias and myalgias, which were difficult to control; she also presented memory loss, which improved progressively thanks to cognitive exercises.

Two months after, she began to present arthritis in hips, wrists and proximal phalanges, with inflammatory characteristics, with negative serological tests. It was classified as post-COVID-19 seronegative rheumatoid-like rheumatoid arthritis and we started treatment with metrotexate.

Due to poor symptomatology control and persistence of high inflammatory parameters, treatment was adjusted (Figure 1), achieving a slow but progressive improvement of the referred symptoms. In November 2022, one year after the infection, the patient presented a picture of epigastralgia and diarrhea(with up to 20 diarrheal episodes per day of bloody stools); presenting a loss of 10 kilos in one month. A colonoscopy study was performed showing chronic granulomatous ileitis, compatible with Crohn's disease (all microbiological studies were negative). Immunosuppressive treatment was adjusted (Figure 1), achieving improvement of the symptoms.

This case discusses the possibility that SARS-CoV-2 may act as an activator of autoimmune diseases, such as rheumatoid arthritis (RA) and inflammatory bowel disease (IBD).

Keywords: *autoimmune disease, COVID-19, pneumonia*

[Abstract:1463]

THE IMPORTANCE OF MULTIDISCIPLINARY MEDICINE IN THE SUSPICION OF OSTEOARTICULAR AND SOFT TISSUE INFECTIONS

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79-year-old male with right hip arthroplasty for coxarthrosis in 2015. In 2018, he visited the emergency department due to right hip pain and functional impotence. Diagnosed with an inguinal abscess involving soft tissues and the psoas muscle with fistulisation to the inguinal region. Required hospitalization, various drainages, and antibiotic treatments guided by microbiological isolates (*Streptococcus agalactiae* group B, *Staphylococcus lugdunensis*), with good progress and discharge.

In April 2021, he returned to the emergency department due to worsening pain and increased purulent discharge through the fistula. Notable leukocytosis of 20,000 cells and CRP of 277 mg/l. Admission was decided, and a CT scan revealed a periprosthetic infectious complication of the right hip with an intrapelvic fistula extending to the iliac muscle and collection, as well as involvement of the oblique abdominal wall musculature. A two-stage prosthetic replacement with surgical debridement was decided. In the first stage, the prosthetic material was removed, and a spacer was placed with intraoperative cultures isolating *Pseudomonas aeruginosa*.

During this admission, initial empirical intravenous antibiotic therapy with vancomycin 1g/12h and rifampin 600 mg/12h was administered. After isolation, intravenous treatment was optimized to meropenem 1g/8h and rifampin 600 mg/12h, given for 6 weeks. Subsequently, oral antibiotic therapy with ciprofloxacin 500 mg/24h and rifampin 600 mg/12h was de-escalated. Discharged after 62 days of hospitalization, maintaining antibiotic therapy at home for one month (a total of 8 weeks of antibiotic treatment). Subsequently, prosthesis replacement was performed in a second stage (August 2021) with good subsequent evolution.

Keywords: *periprosthetic infectious, infectious diseases, antibiotic therapy*

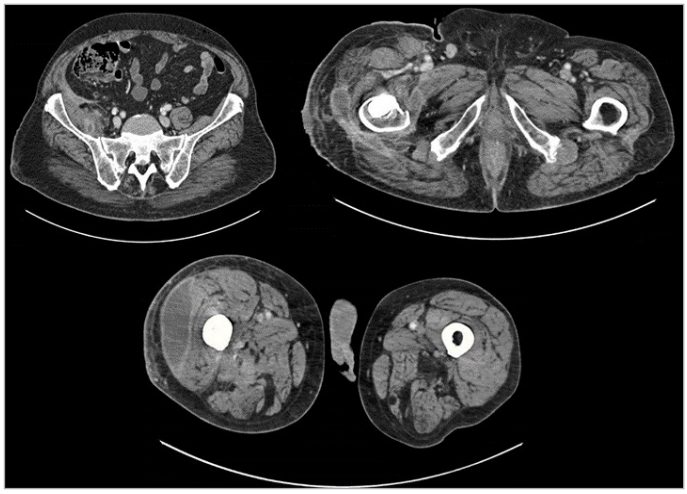

Figure 1. *Periprosthetic infectious complication of the right hip with an intrapelvic fistula extending to the iliac muscle and collection, as well as involvement of the oblique abdominal wall musculature.*

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[Abstract:1493]

CURRENT SITUATION OF IMPORTED MALARIA IN THE HEALTH AREA OF ALMERIA

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Parasitosis constitutes one of the most important groups of diseases related to the pathology of the immigrant and the traveler. The south-eastern region of Spain presents one of the highest immigration rates in this country, with a considerable increase in imported diseases, among which Malaria stands out. The objective of this study is to describe the demographic and epidemiological characteristics of these patients.

We realize a retrospective observational study of patients over 14 years of age with a diagnosis of Malaria, within our registry of the Almeria Health area between 2013-2023.

The demographic variables included were: age and sex; Year of acquisition and country of origin. We included the classification of migrants as VFR (Visiting friends and relatives) or non-VFR.

In the analysed time period, a total of 86 patients diagnosed with Malaria were studied. The average age of the patients was 35.5 years. In relation to sex, 82.3% were men, with 17.7% women. The majority of cases come from sub-Saharan migrants, with the majority being VFR (89.4%) compared to non-VFR (10.6%). The most frequent countries were Mali (58.8%), Guinea Bissau (15.3%) and Ghana (8.2%). In Spain, an average of 700-800 cases of imported malaria are reported each year. Most cases diagnosed in the south of the peninsula.

In turn, one of the areas with the most influence on these numbers is the province of Almería. In recent years, Almeria has shown powerful economic growth, which has been translated in parallel into an increase in the number of immigrants, mainly from areas of central Africa, with several predefined migratory routes.

Keywords: *malaria, immigration, plasmodium*

[Abstract:1496]

THE HUMBLER, THE BETTER: AN UNEXPECTED DIAGNOSIS CONCERNING A STORY OF COUGHING AND INGUINAL MASS

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A 32-year-old male from Peru presented to the Emergency Department with a 4-day history of fever, odynophagia, and non-productive cough. Furthermore, he reported nausea, vomiting, and the sudden appearance of a painful mass in the right iliac fossa, which was exacerbated by coughing.

Physical examination revealed an inguinal mass, initially suspected as a complicated inguinal hernia. However, a surgical consultation discarded this diagnosis, suggesting an inflamed lymph node conglomerate.

The patient did not show any other relevant physical findings. Vital signs on admission were a blood pressure of 105/76 mmHg, a heart rate of 118 bpm, a temperature of 38°C, and an oxygen saturation of 98%. Laboratory tests reported elevated acute-phase reactants: (PCR 297 mg/dL, WBC 24,700/µL, Procalcitonin 7.36 ng/mL). A CT scan was performed, revealing inflammatory changes in the right inguinal fat with multiple reactive adenopathies. Blood cultures were extracted, broad-spectrum antibiotherapy, and fluid resuscitation were initiated.

The patient was admitted to the Infectious Diseases Service with suspected soft tissue sepsis. The day after admission, the patient deteriorated (SOFA score 6) and was admitted to the ICU. Positive blood cultures for S. pyogenes multisensitive suggested the diagnosis of Streptococcal Toxic Shock Syndrome (STSS). Penicillin G and Clindamycin were added to antibiotic treatment, which, alongside multiple surgical debridements, resulted in a fast improvement. The patient was transferred to the general ward and discharged home after 10 days.

This case underscores that STSS requires a high clinical suspicion and has fatal consequences if adequate treatment is not initiated on time.

Keywords: *infectious diseases, shock, streptococcal toxin*

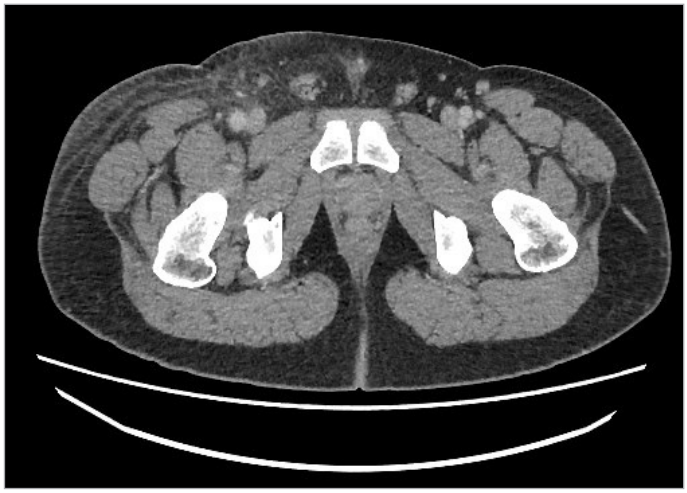

Figure 1. *CT-scan results.*

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[Abstract:1510]

COUGH, FEVER, DYSPNEA: COULD THIS PATIENT HAVE PERTUSSIS?

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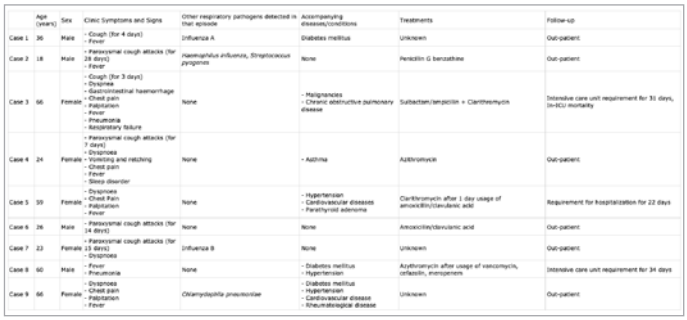
Purpose: Pertussis (whooping cough) is a respiratory disease that affects all age groups and is characterized by severe, paroxysmal cough attacks. The etiologic agent, *Bordetella pertussis*, is a Gram-negative, aerobic, nonmotile bacterium that colonizes the respiratory tract of humans. Polymerase chain reaction (PCR)-based diagnostic tests are much more sensitive than culture and can remain positive for days despite antimicrobial therapy. We aimed to retrospectively evaluate the demographic characteristics, clinical course and outcomes of adult patients who had a positive *B. pertussis* PCR test result.

Methods: Patients admitted between 01/01/2013 and 01/06/2023 and had a swab sample for a multiplex respiratory pathogen PCR test for any reason were screened for a positive *B. pertussis* PCR test. Adult patients (≥18 years) who tested positive were evaluated for clinical characteristics, course and outcomes.

Findings: There were nine cases (median age 36 years) with a positive B. pertussis PCR test detected between 2014 and 2021. Four cases had no comorbid condition. Table 1 demonstrates demographic and clinical characteristics of the patients.

Conclusions: Adults and especially older people may present with variable and severe clinical presentations such as pneumonia, respiratory failure and may have a history of long hospitalization due to pertussis. Pertussis should definitely be included in the differential diagnosis by clinicians, even in cases with acute cough and dyspnoea. Serological data shows that adults constitute a potential reservoir and 90% of adults visiting the outpatient clinics do not have protective antibody levels against pertussis, indicating the importance of a lifelong vaccination strategy.

Keywords: *Bordetella pertussis, polymerase chain reaction, whooping cough, dyspnoea*



	Age (years)	Sex	Clinic Symptoms and Signs	Other respiratory pathogens detected in that episode	Accompanying diseases/conditions	Treatments	Follow-up
Case 1	36	Male	- Cough (for 4 days) - Fever	Influenza A	Diabetes mellitus	Unknown	Out-patient
Case 2	18	Male	- Paroxysmal cough attacks (for 28 days) - Fever	*Haemophilus influenza, Streptococcus pyogenes*	None	Penicillin G benzathine	Out-patient
Case 3	66	Female	- Cough (for 3 days) - Dyspnea - Gastrointestinal haemorrhage - Chest pain - Palpitation - Fever - Pneumonia - Respiratory failure	None	- Malignancies - Chronic obstructive pulmonary disease	Sulbactam/ampicillin + Clarithromycin	Intensive care unit requirement for 31 days, in-ICU mortality
Case 4	24	Female	- Paroxysmal cough attacks (for 7 days) - Dyspnoea - Vomiting and retching - Chest pain - Fever - Sleep disorder	None	- Asthma	Azithromycin	Out-patient
Case 5	59	Female	- Dyspnoea - Chest Pain - Palpitation - Fever	None	- Hypertension - Cardiovascular diseases - Parathyroid adenoma	Clarithromycin after 1 day usage of amoxicillin/clavulanic acid	Requirement for hospitalization for 22 days
Case 6	26	Male	- Paroxysmal cough attacks (for 14 days)	None	None	Amoxicillin/clavulanic acid	Out-patient
Case 7	23	Female	- Paroxysmal cough attacks (for 15 days) - Dyspnoea	Influenza B	None	Unknown	Out-patient
Case 8	60	Male	- Fever - Pneumonia	None	- Diabetes mellitus - Hypertension	Azythromycin after usage of vancomycin, cefazolin, meropenem	Intensive care unit requirement for 34 days
Case 9	66	Female	- Dyspnoea - Chest pain - Palpitation - Fever	*Chlamydophila pneumoniae*	- Diabetes mellitus - Hypertension - Cardiovascular disease - Rheumatological disease	Unknown	Out-patient

Table 1. *Demographic and clinical characteristics with outcomes of B. pertussis PCR positive adult patients.*

[Abstract:1515]

STUDY OF PATIENT WITH MALARIA IN A THIRD LEVEL HOSPITAL

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Malaria is the most important parasitic disease in the world, causing an enormous burden of morbidity and mortality in those areas where it is endemic, as well as a diagnostic-therapeutic challenge in the areas where it is imported. This work (Retrospective observational study) aims to describe the epidemiological, clinical, and treatment characteristics of patients over 14 years of age, with a diagnosis of Malaria, in the Health Area of Almería, in the last 10 years of follow-up. In the analysed time period, a total of 85 patients diagnosed with Malaria were studied. The most frequent symptomatology was fever, present in 83.6%. In second place arthromyalgia, reported by 56% of patients overall, followed by abdominal pain (18%) and diarrhoea (10%). Of the 85 malaria cases, 70 (82.3%) were microscopic malaria (MM) and 15 (17.7%) submicroscopic malaria (SMM). Of the MM patients, 84.2% occurred in VFR (Visiting friends and relatives), while SMM cases were more evenly divided between VFR and non-VFR. Parasitemia levels were similar in both groups. Only 7% (n = 6) of VFR migrants reported taking malaria prophylaxis adequately. The incidence of Malaria in the southeastern region of the peninsula has increased in recent years. Mainly, coming from immigrants from West Africa, and residents in Spain, who make round trips to their country of origin. Health professionals must know the particularities of these migrants as well as have the tools to disseminate correct prophylaxis, prevention measures and appropriate practices to carry out their trip without risk and safety.

Keywords: *malaria, Plasmodium, Spain*

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[Abstract:1520]

MPOX; A DESCRIPTIVE STUDY OF SOCIODEMOGRAPHIC, CLINICAL AND BEHAVIORAL CHARACTERISTICS

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Objectives: To describe the sociodemographic, clinical and behavioural characteristics of the population with mpox infection diagnosed in an STI centre and its referral hospital.

Materials and Methods: Descriptive and retrospective study of confirmed cases of mpox by positive PCR in exudate of skin lesions. Cases were consecutively included since May 2022 in an STI referral centre and its referral hospital in the Community of Madrid. Patient information was obtained from the usual clinical history and by means of a structured epidemiological questionnaire.

Results: Data were obtained from 483 patients with a mean age of 36.0 years (RIQ 30.0;43.0). A total of 482 (99.8%) were cisgender men. Sociodemographic, clinical, and behavioural characteristics are shown in Tables 1 and 2.

Discussion and Conclusions: Mpox virus primarily affects a young, sexually active demographic, with a prevalence among homosexual, bisexual, and other men who have sex with men (GBHSH). Clinical presentations commonly involve fever, skin lesions, asthenia, rash, headache, myalgia, inguinal lymphadenopathy, odynophagia, proctitis, or respiratory symptoms. The targeted focus of preventive measures, including vaccination, should be on people living with HIV (PLHIV) and pre-exposure prophylaxis (PrEP) users, constituting over one third of cases. The population also exhibits a high prevalence of drug use and unprotected sexual practices, necessitating detection and intervention within internal medicine services. For those diagnosed with mpox who fall outside PLHIV and PrEP user categories, the diagnosis becomes an opportunity for evaluating individuals, conducting HIV serology, screening for other sexually transmitted infections, and potentially including them in PrEP programs.

Keywords: *mpox, GBMSM, PLHIV*

Features	n	%	N
Sexual conducts			
Sexual relations without protection	453	(96.8%)	468
Anal sex	426	(88.0%)	484
Oral sex	398	(82.2%)	484
Vaginal sex	6	(1.24%)	484
Role in anal sex			421
Active	116	(27.6%)	
Pasive	68	(16.2%)	
Versatile	237	(56.3%)	
* N.º of partners in the last 3 weeks, median of 4.00 IQR [2.00;8.75] with n=454			
Toxins consume			
Recent toxins consume	265	(55.9%)	474
Type of drugs consumed			484
Mephedrone	151	(31.2%)	
Poppers	135	(27.9%)	
GHB	125	(25.8%)	
Erection enhancers	56	(11.6%)	
Methamphetamines	49	(10.1%)	
Others	148	(30.58%)	
Route of administration			484
Intravenous	19	(3.93%)	
Shared route of administration	108	(51.2%)	211
Nasal	89	(82.4%)	108
Injected	8	(7.41%)	108

Table 1. Features.

Features	n	%	N
Risk categories			445
GBMSM never IDU	417	(93.70%)	
GBMSM IDU or ex IDU	14	(3.15%)	
GBMSM engaging in prostitution	14	(3.15%)	
HIV-Related Characteristics			
Viral Load in HIV+ Patients			139
Undetectable	134	(96.4%)	
Detectable	5	(3.60%)	
* (Median viral load of 380 copies/ml IRQ (360;702) (n=5)			
CDC HIV Patient Categories	129		
A1	62	(48.1%)	
A2	40	(31.0%)	
A3	7	(5.43%)	
B1	2	(1.55%)	
B2	3	(2.33%)	
B3	2	(1.55%)	
C1	1	(0.78%)	
C2	12	(9.30%)	
C3	0	(0.00%)	

Table 2. Features.

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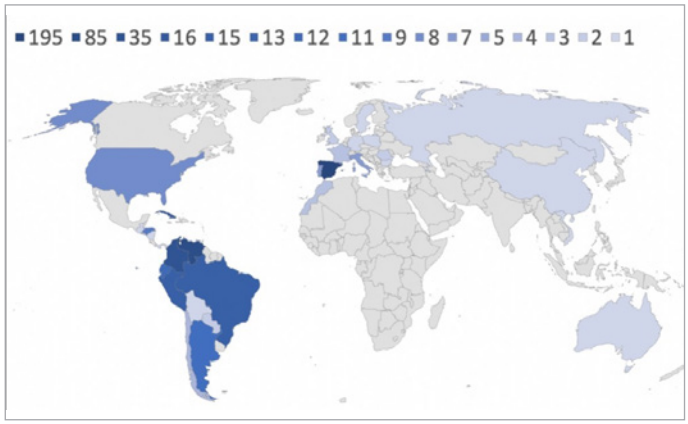

Figure 1. Summary of the origin of the population (N 470) Spain 195 (41.5%); South and Central America 231(49.15%); Europe 26 (5.53%); Others 18 (3.83%).

[Abstract:1522]

STUDY OF MICROBIOLOGICAL CHARACTERISTICS OF PATIENTS WITH IMPORTED MALARIA IN THE HEALTH AREA OF ALMERÍA

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Since 2010, the diagnosis of cases of imported Malaria in the Region of Almería has quadrupled. To a large extent, these diagnoses come from immigrants who travel to their countries of origin and return from endemic areas (VFR). Our study focuses on imported cases of malaria in our health area in recent years. The number of cases has been similar in recent years. We have carried out a Retrospective observational study of patients over 14 years of age with a diagnosis of Malaria, within our registry of the Almeria Health area between January 2013-2023.In the analysed time period, a total of 86 patients diagnosed with Malaria were studied. The majority of them are VFR immigrants, as happens in other areas with similar characteristics in southern Spain. This is due to the characteristics of the region, and the great demand for agricultural work, which is mostly supplied by emigrants. In this type of patients, *P. falciparum* represented 92.1% of all cases, *P. vivax* (4.7%) and *P. ovale* (2.3%) in line with the data obtained in European studies. Likewise, the Microscopic malaria (MM) subtype was the most predominant form of malaria. Most cases were mild with parasitemia <1% in 50% of cases. Among the most serious cases, with parasitaemia >4% (17% of treated patients), it is striking that only three patients required admission to the intensive care unit, with no deaths occurring. Probably explained by improvements in healthcare, as well as current therapeutic development. The characteristics of VFR patients with respect to Non-VFR have been very similar, even in the diagnosis of MM and SMM.

Keywords: malaria, Almeria, Plasmodium, falciparum, vivax, ovale

[Abstract:1527]

POST-EXPOSURE PROPHYLAXIS PROTOCOL AGAINST HIV IN A SPANISH HOSPITAL: EVALUATION 4 YEARS AFTER IMPLEMENTATION

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Background and Aims: Post-exposure prophylaxis against HIV (PEP) is the only way to reduce the risk of HIV infection in an individual who has been exposed to HIV. It is widely considered an integral part of the prevention strategy. If started soon after exposure, PEP can reduce the risk of HIV infection by over 80%. We aim to evaluate a nonoccupational PEP (using Tenofovir-Emtricitabine plus Raltegravir) protocol after 4 years of implementation to know user characteristics and outcomes.

Materials and Methods: An observational, descriptive, retrospective study including patients evaluated for non-occupational PEP. Data were collected from electronic clinical records.

Results: 103 episodes were registered. 58.3% of users were women, and the mean age was 28.6 years (Standard deviation 10.6 years). 79.6% of users were from Spain, 15.5% were from Latin America, and 2.9% were from Africa. 60.2% of exposures were related to sexual violence. Only 67.3% of users received PEP treatment. In 30% of those not receiving PEP treatment, the reason was that they were not evaluated soon enough. No HIV infections were registered, and none of the patients who initiated PEP discontinued in relation to secondary effects.

Being women and receiving care related to sexual aggression showed statistical significance (51.5% vs. 8.7%, p<0.01), while men seeking attention were associated with any other exposure.

Discussion: PEP is an effective and safe measure to reduce HIV infections. Awareness among doctors and potential users should increase.

Keywords: HIV, PEP, prophylaxis

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[Abstract:1531]

ACUTE NEUROLOGICAL COMPLICATIONS AND OTHER EFFECTS IN EPSTEIN-BARR VIRUS INFECTION

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A 17-year-old man was evaluated with a week history of malaise, progressive paraesthesia in lower limbs, acute muscle weakness and urinary retention. Physical examination revealed spasticity, hyperactive reflexes in lower extremity and tactile-algesic and thermal hypoesthesia with a D10 level. Magnetic resonance imaging (MRI) of the spine showed long segment cord lesions with hyperintense signal on T2-weighted from D3 to D8 were consistent with longitudinally extensive myelitis. Lumbar puncture evidenced lymphocytic pleocytosis and negative molecular tests for infection, oligoclonal bands and visual evoked potentials. On brain MRI showed lesions in the deep and subcortical white matter, characteristic of demyelination. The diagnosis of acute disseminated encephalomyelitis (ADEM) was established and treated with intravenous high-doses methylprednisolone followed by oral glucocorticoid tapering.

Moreover, during hospitalization, chest radiograph and computed tomography showed mediastinal adenopathies as well as low grade fever and maculopapular rash. Blood assays found lymphocytosis and herpes virus serologic screening was positive for IgM antibodies directed against the Epstein-Barr viral (EBV). In summary, acute EBV infection with ADEM was confirmed.

A chest radiograph obtained tree months later showed enlargement of mediastinal mass. The endobronchial ultrasound guided fine needle aspirations was performed for suspected lymphoma, but the sampling size was insufficient to complete the study. Surgical biopsy of mass by thoracoscopy was performed, confirming the diagnosis of classical Hodgkin's lymphoma with nodular sclerosis subtype.

In conclusion, EBV may be associated with demyelinating neurological complications such as transverse myelitis independently of brain involvement and causally be linked to a variety of malignancies, including lymphomas.

Keywords: *Epstein-Barr virus, encephalomyelitis, lymphoma*

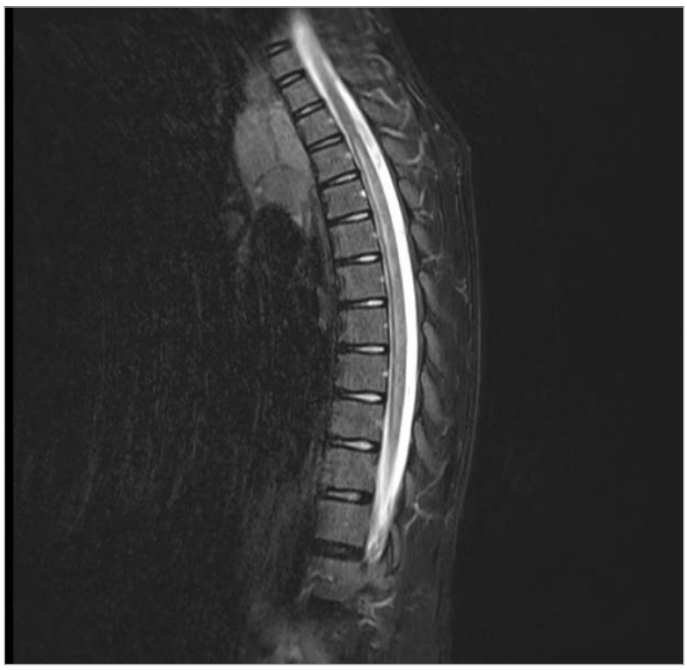

Figure 1. *Magnetic resonance imaging (MRI) of the spine showed long segment cord lesions with hyperintense signal on T2-weighted from D3 to D8 were consistent with longitudinally extensive myelitis.*

[Abstract:1539]

RESPONSE TO ANTIRETROVIRAL TREATMENT AMONG HIV-INFECTED PRISONERS IN HUELVA PRISON

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[1] ⚠ The authors did not provide affiliations upon requests from the event organizer

Determination of the immunological status, adherence and response to treatment, as well as current therapy among HIV-infected inmates in Huelva prison.

Descriptive observational study conducted among inmates of the Huelva prison diagnosed with HIV and currently receiving treatment. Various demographic variables, lines of antiretroviral treatment (ART), analytical and immunological response to treatment, comorbidities and need for recent hospitalization were included.

39 patients with a mean age of 50.9 years were included, of whom 38 (97.4%) were men. The most common mechanism of infection was parenteral transmission (89.7%). The mean number of years on ART was 15.6 years, with a mean of 4.96 lines of treatment per patient since initiation.

The most used current regimens are bictegravir/emtricitabine/tenofovir-alafenamide and darunavir/cobicistat/emtricitabine/tenofovir-alafenamide, with 11 (28.2%) patients on each regimen. The mean CD4+ lymphocyte count at the last recorded blood test was 540 cells/ml, with an undetectable viral load in 78.94% of patients. Among the 39, 29 (74.4%) had antibodies against HCV, 23 were being treated and sofosbuvir/velpatasvir was the most

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used therapy (15.4%). Of the 23, 22 (95.6%) achieved a sustained viral response and were able to complete treatment.
In the last two years, 9 patients required hospital admission, with pneumonia (12.8%) being the main cause of admission. There is a high prevalence of HIV in prisons, and it is often a major cause of medical need among prisoners. HIV and HCV co-infection is very common and usually requires combination therapy, as well as regular monitoring of treatment response.

Keywords: *VIH, infection, prison*

[Abstract:1540]

SCREENING FOR IMPORTED INFECTIOUS PATHOLOGY IN THE IMMIGRANT POPULATION IN THE HOSPITAL AREA OF THE HOSPITAL INFANTA ELENA DE HUELVA, SPAIN

Carlos Armada Arca[1], *Gabriel Mariscal Vázquez*[1], *María Elena Mansilla Rodríguez*[1], *María Gloria Rojano Rivero*[1]

[1] ⚠ The authors did not provide affiliations upon requests from the event organizer

Description of the results obtained in the screening of infectious pathology in immigrant patients treated at the Infectious Diseases Unit of the Infanta Elena Hospital in Huelva.
Observational descriptive study of infectious disease screening of migrants attending the Infectious Diseases Clinic in 2022.
The screening consisted of chest X-ray and blood count, biochemistry, urinalysis, serology for hepatitis B virus (HBV), hepatitis C virus (HCV), HIV, treponema pallidum; and serology for schistosomiasis and/or strongyloides was requested for those patients with compatible clinical or laboratory findings, along a Mantoux test. 89 patients were included with a mean age of 26.18 years, 97.8% of whom were men. 14 (15.7%) patients reported chronic HBV infection and 32 (36%) reported past infection. One patient had HCV infection and only one case of asymptomatic HIV stage 1 (32970 copies/mL and 132 CD4 /µL at diagnosis) was detected. Two cases of late latent syphilis were detected.
11 (12.35%) cases of schistosomiasis were detected, 6 of which presented with systemic urinary microhaematuria, the other 5 were observed after eosinophilia. Parasite eggs were found in the urine of two patients.
2 (2.2%) cases of strongyloidiasis were diagnosed, of which only one had eosinophilia, while the other was diagnosed after a positive result for schistosomiasis.
3 (3.37%) cases of tuberculosis were confirmed, two of which were latent, and one was active tuberculosis.
The screening among the immigrant population was effective and allowed the diagnosis of various viral, bacterial and parasitic infectious entities, as well as the initiation of treatment, follow-up and prevention of their transmission.

Keywords: *imported, immigrants, infections*

[Abstract:1552]

A CASE OF INFECTIVE ENDOCARDITIS COMPLICATED BY MULTIPL SEPTIC EMBOLISMS

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A 66-year-old female patient applied to the outpatient clinic with complaints of fever and painful defecation. The patient had a history of iron deficiency anaemia, for which she underwent a colonoscopy with band ligation for grade 3 internal haemorrhoids with bleeding areas, 5 days before. Physical examination findings revealed a fever of 38 degrees, blood pressure of 100/70 mmHg, and a 2/6 murmur in the mitral area. Blood tests revealed CRP: 41 mg/L, WBC: 14.000, HB 9.5 g/dL, MCV 75 fL, and urine analysis revealed erythrocyte 200 and protein 100. The patient was admitted to the internal medicine service and urine and blood cultures were taken. When *Enterococcus Faecalis* was found in the blood culture, the antibiotic therapy was changed to gentamicin 3x80 mg and ampicillin-sulbactam 2x1 g. Echocardiography revealed 1.5 cm of vegetation on the mitral valve (figure 1 and 2). Infective endocarditis was diagnosed. In terms of complications, a splenic infarct (figure 3) area was detected on abdominal tomography, and ischemic areas in the late subacute stage (figure 4) were detected on brain MRI. Low molecular weight heparin treatment was initiated. In the following days, the patient complained of pain and numbness in his arm, and contrast-enhanced angiography revealed that he had an embolism at the axillary-brachial artery junction (figure 5). Subsequent echocardiography showed that the vegetation had shrunk but had greater mobility. A decision was made for surgical treatment (mitral valve replacement). The patient, who was followed up and treated in the postoperative ward, was discharged with a prescription.

Keywords: *infective endocarditis, septic embolisms, Enterococcus faecalis*

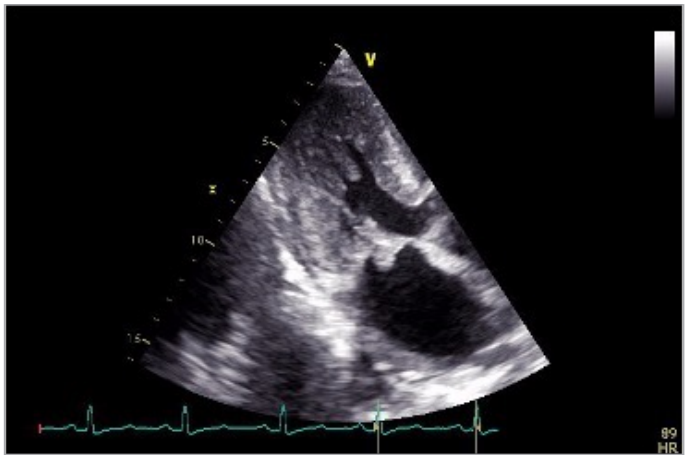

Figure 1. *Vegetation on the mitral valve.*

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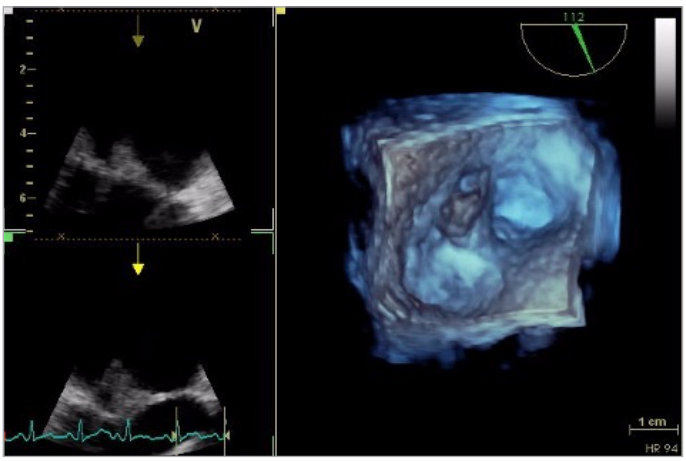

Figure 2. Vegetation on the mitral valve.

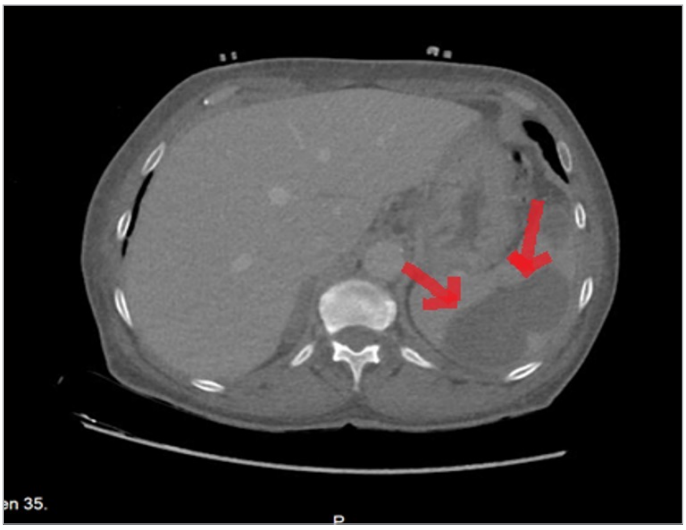

Figure 3. Splenic infarct.

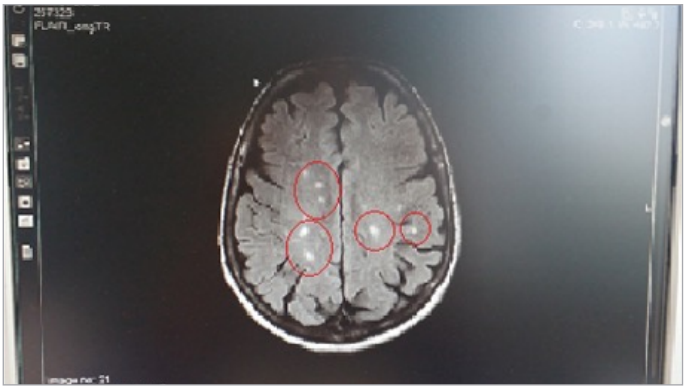

Figure 4. Ischemic areas in the late subacute stage.

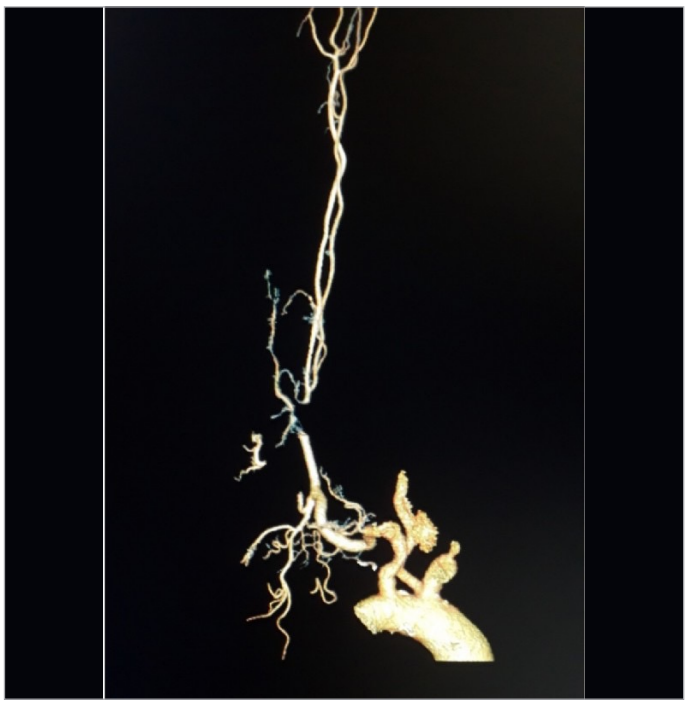

Figure 5. Embolism at the axillary-brachial artery junction.

[Abstract:1556]

SPONDYLODISCITIS. CLINICAL CASE AND BIBLIOGRAPHIC REVIEW

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[2] Infectious Diseases, Hospital Universitario de Jerez, Servicio Andaluz de Salud, Jerez de la Frontera, Spain

An 80-year-old woman with lumbar canal stenosis, operated on a year ago with L3-L5 osteosynthesis material, is admitted for lumbar pain of one week's evolution, onset at rest and increasing with movement. On examination, Lassegue and Bragard negative, surgical wound of good appearance, motor/sensory balance of the lower extremities preserved, no saddle anaesthesia and adequate sphincter control. Analytically, procalcitonin (0.11 ng/mL), C-reactive protein (316 mg/L) and leukocytosis (12110/uL) at the expense of neutrophils (9550/uL).

Radiological study was performed by X-ray of the spine and hip, computed axial tomography with contrast and lumbosacral magnetic resonance imaging without observing data of spondylodiscitis or involvement of the osteosynthesis material.

However, the microbiological study showed persistent bacteraemia due to *S. epidermidis*, despite targeted antibiotherapy with intravenous cefazolin 2g/8h. Therefore, transthoracic and transoesophageal echocardiogram was performed, being negative for endocarditis. Discharge was decided given the clinical and analytical improvement of the patient with oral clindamycin 600 mg/6h and ambulatory bone scintigraphy and lumbosacral nuclear magnetic resonance control after completion of the antibiotic regimen.

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Both tests showed signs of spondylodiscitis at L2-L3 level due to *S. epidermidis* secondary to infection of the osteosynthesis material. Spondylodiscitis is an infection of the vertebrae and intervertebral discs affecting mainly the lumbar area that requires a diagnosis based on clinical findings, compatible microbiology and imaging tests, the most sensitive being MRI. Treatment with antibiotherapy directed at the microorganism responsible, the most frequent being *S. aureus*.

Keywords: *spondylodiscitis, osteomyelitis, Staphylococcus aureus, Staphylococcus epidermidis*

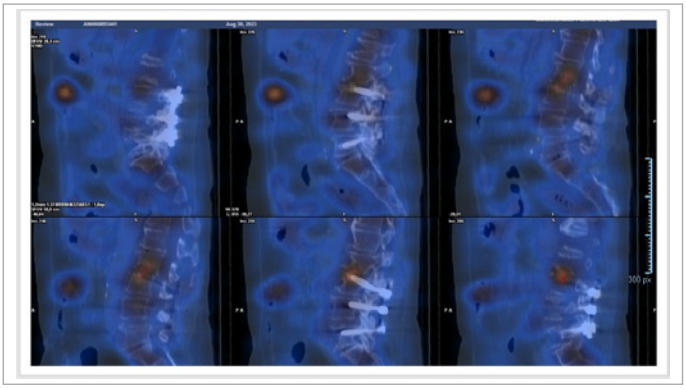

Figure 1. *Gammagraphy.*

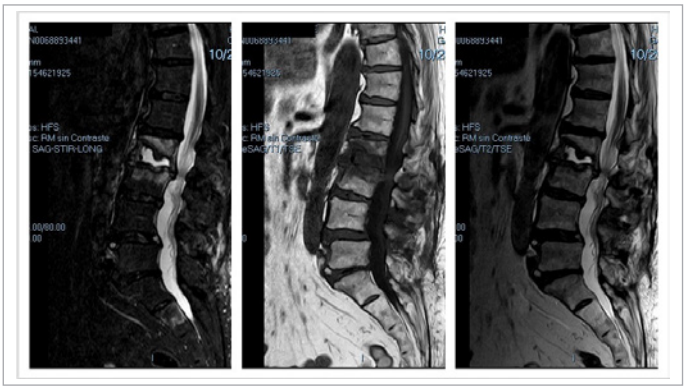

Figure 2. *Lumbosacral magnetic resonance.*

[Abstract:1560]

BEYOND FRACTURES: THE IMPORTANCE OF PAYING ATTENTION TO A CHANCE FINDING

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Case Presentation: A 17-year-old Senegalese male, residing in Spain for 9 months, presented to Traumatology following a bilateral tibia fracture due to a traffic accident. The right fracture was treated with intramedullary nail fixation, while the left was managed conservatively. During hospitalization, elevated blood pressure (150/80 mmHg) prompted an internal medicine consultation. The patient reported intermittent asymptomatic macroscopic haematuria, with a history of residing in a rural area and freshwater exposure. Physical examination was unremarkable. Emergency labs revealed haematuria, leukocyturia, and mild normocytic anaemia. Post-surgery, moderate eosinophilia was noted. Renal ultrasound identified two polypoid vesical lesions.

Hypothesis: Considering the epidemiological background, eosinophilia, and haematuria, the investigation focused on imported causes of eosinophilia.

Diagnostic Pathways: Upon pain control, blood pressure normalized. Urine parasite analysis confirmed the presence of *Schistosoma haematobium* eggs. Praziquantel was prescribed, and further studies for imported diseases yielded negative results.

Discussion and Learning Points: Schistosoma, a parasitic flatworm, predominantly affects Sub-Saharan Africa, the Nile basin, and parts of the Middle East and Southeast Asia. Schistosoma haematobium presents with haematuria, potentially accompanied by fever or dysuria. Infections occur through skin penetration by cercariae in infested water. Post-parasitic treatment, it is recommended to verify egg eradication in urine and assess urinary tract lesions. Persistence after six months necessitates ruling out conditions like bladder squamous cell carcinoma, requiring cystoscopy.

This case underscores the importance of comprehensive patient assessment and awareness of changing disease distribution patterns due to climate change and migration. All from endemic areas need serological tests; asymptomatic travellers may benefit.

Keywords: *eosinophilia, haematuria, imported pathology*

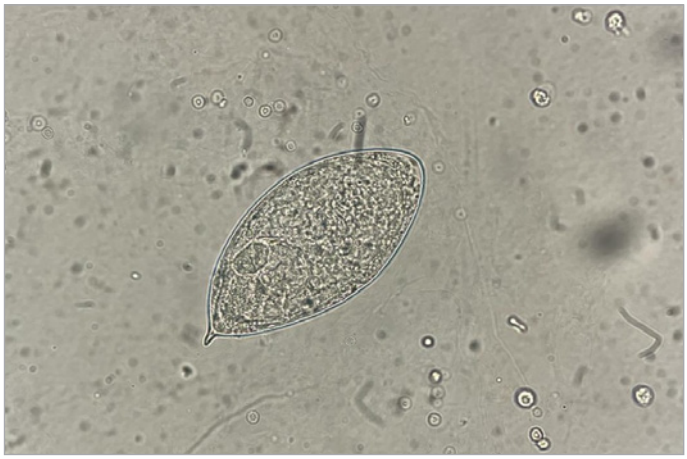

Figure 1. *Schistosoma haematobium egg found in patient's urine.*

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[Abstract:1567]

FEVER, LYMPHADENOPATHY AND PRECORDIAL MASS: A RARE CASE OF TUBERCULOSIS

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[2] Infectious Diseases, Hospital Universitario de Jerez, Servicio Andaluz de Salud, Jerez de la Frontera, Spain

A 23-years-old Malian man, resident in Spain since 2022 and without previous known pathologies, was referred by primary care due to positive Mantoux test. He had evening-predominant fever in the last year without respiratory symptoms, diaphoresis, or weight loss. Upon examination, left cervical and supraclavicular adenopathies were detected. Initial chest x-ray was normal. A full body computed tomography (CT) was ordered showing cervical and mediastinal adenopathies, a mass in the left upper bronchus and bone lesions in ribs, vertebrae, and sacrum. Diagnostic options included lymphoma, bronchial cancer, tuberculosis, histoplasmosis, sarcoidosis, or histiocytosis, among others. A fibrobronchoscopy and an endoscopic ultrasound fine-needle aspiration were performed and microbiologic and pathologic results were negative or inconclusive. The positron emission tomography (PET) scan showed findings consistent with an aggressive neoplastic or lymphoproliferative process, suggesting cervical lymphadenopathy for biopsy. The biopsy result was reactive adenitis.

One month later, a painless left precordial mass appeared, which, upon ultrasound evaluation, was determined to be an abscess. Percutaneous drainage was carried out, and in the sample *M. tuberculosis* was identified. The patient was diagnosed with disseminated tuberculosis involving lymph nodes, lungs, and bones, with the formation of a cold abscess in the chest wall. He started antituberculous treatment and was referred to Thoracic Surgery for management of the abscess.

This is rare case of tuberculosis with a cold abscess in the chest wall. The management of these cases differs from typical tuberculosis as they usually require surgical treatment and prolonged courses of antituberculous medications (12 months).

Keywords: *tuberculosis, Mantoux, mycobacteria, histiocytosis*

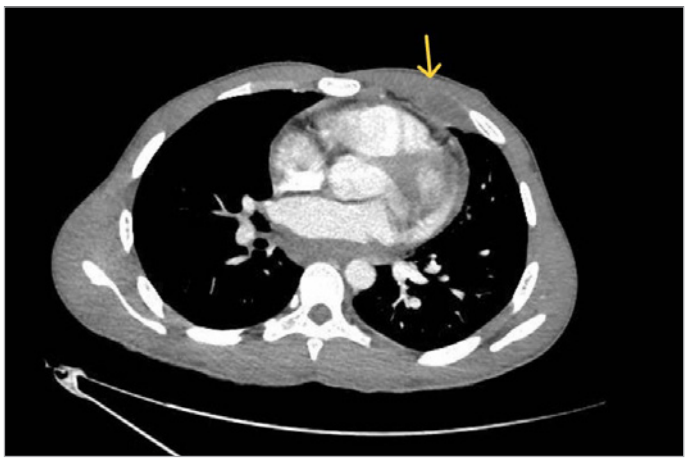

Figure 1. *Computed axial tomography. Abcess in the rib area.*

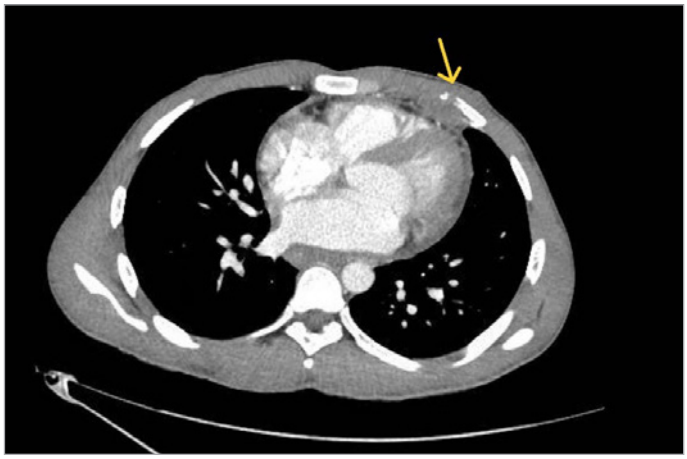

Figure 2. *Computed axial tomography. Bone destruction.*

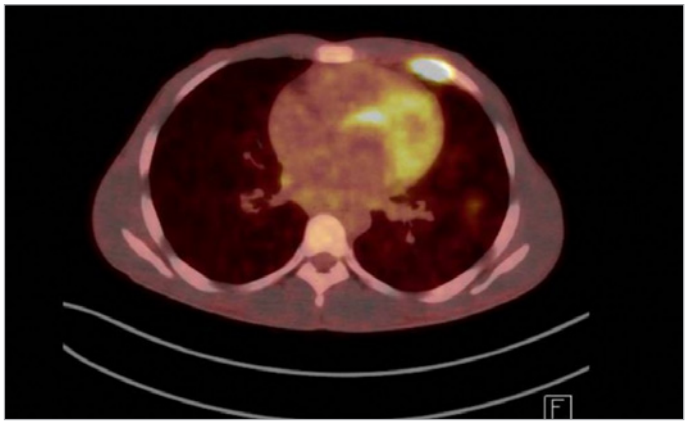

Figure 3. *Positron Emission Tomography (PET).*

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[Abstract:1568]

INFECTIVE ENDOCARDITIS BEYOND THE USUAL PATHOGENS. *GEMELLA HAEMOLYSANS*, PRESENTATION AND OUTCOME

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A 53-year-old man with a history of hypertension, chronic alcoholism and smoking habit, who had experienced paroxysmal episodes of shivering, sweating, orthostatism and progressive asthenia during the previous 15 days. No specific source of infection was identified. The patient reported no dental follow-up in 30 years.

Physical examination revealed haemodynamic stability and afebrile. Cardiac auscultation was arrhythmic, with a systolic murmur III/IV in the mitral focus radiating to the axilla. Blood tests presented leukocytosis with absolute neutrophilia and elevated acute phase reactants. Electrocardiogram showed new-onset atrial fibrillation.

Given the high suspicion of endocarditis and after excluding other foci and after obtaining blood cultures, empirical treatment was initiated with ceftriaxone, ampicillin and cloxacillin. Transthoracic echocardiogram identified severe mitral insufficiency due to posterior leaflet prolapse, but no images suggestive of endocarditis were found. However, transesophageal echocardiogram revealed a 4-mm image in the posterior leaflet of the mitral valve, compatible with an infective wart. Blood cultures isolated *Gemella haemolysans*, and treatment was adjusted according to the antibiogram.

Given the situation, valve replacement surgery was decided. After hospital surveillance, the patient completed parenteral antibiotic treatment for 6 weeks.

The genus *Gemella* consists of 6 species of Gram-positive and anaerobic cocci that belong to the usual microbiota of mucous membranes, particularly the oral cavity. Often underdiagnosed due to characteristics shared with other commensal species, it is commonly associated with endovascular infections, especially endocarditis, the main risk factors being dental manipulations/poor dental hygiene and a history of valvular damage.

Keywords: *infective endocarditis, Gemella haemolysans, native mitral valve*

[Abstract:1611]

A RARE BLOOD TRANSFUSION COMPLICATION: *BACILLUS THERMOAMYLOVORANS* BACTERAEMIA AND DIFFUSE PUSTULAR RASH

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A 71-year-old male patient with known type 2 diabetes mellitus, prediagnosis of myelodysplastic syndrome (MDS) presented to our centre with bilateral oedema and red-purple non-blanching pustular rashes and bullous lesions on the upper and lower extremities that started 48 hours after erythrocyte suspension replacement. The patient had pancytopenia. Acute phase reactants were elevated. Skin biopsies were performed with the prediagnoses of pustular vasculitis, Sweet's syndrome, and acute generalized exanthematous pustulosis.

In the follow-up, intravenous clindamycin 3x600 mg/day and cefazolin 3x2 gr/day were started empirically as the patient's lesions increased, acute phase reactants increased, and skin ultrasonography was suggestive of infective pathologies.

The patient's skin biopsy result was reported as "crust and bacterial impegitination findings were observed on the surface of the sections, epidermis was generally normal, dense erythrocyte extravasation on the surface of the dermis, perivascular mild inflammation consisting of lymphocytes was observed. *Bacillus thermoamylovorans* was observed in the blood culture. Due to the presence of *Bacillus thermoamylovorans* species producing Beta lactamase in the literature, Cefazolin treatment was stopped and Teicoplanin treatment was started. Clindamycin treatment was continued.

Complete response was achieved in skin lesions with antibiotics.

Although bacteria isolated as Bacillus spp. were reported in the literature, no case report of *Bacillus thermoamylovorans* bacteraemia was encountered. While there is not enough information in the literature about Bacillus thermoamylovorans contaminating blood products, this case may be the first case of *Bacillus* thermoamylovorans bacteraemia developed after blood product transfusion.

Keywords: *Bacillus thermoamylovorans, transfusion reaction, bacteraemia, rash*

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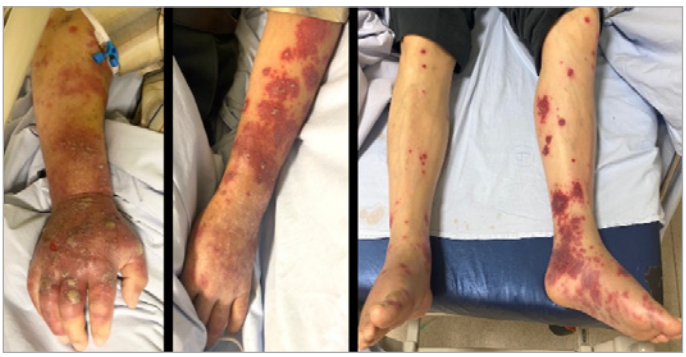

Figure 1. Images of the patient's rash at the time of admission to our center (4 days after erythrocyte suspension replacement, 2 days after the onset of the rash).

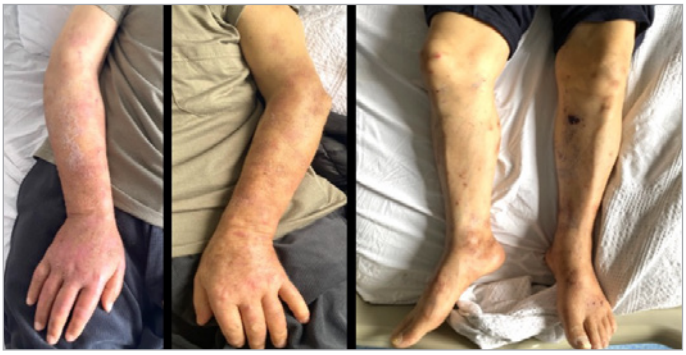

Figure 2. Images of the patient's rash after antibiotherapy (14th day of treatment).

[Abstract:1615]

OROFACIAL *HERPES ZOSTER* IN A YOUNG MAN

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Shingles is a reactivation of Varicella zoster virus (VZV) after a previous infection, commonly involving ophthalmic branch of trigeminal nerve. It usually affects elderly individuals and at younger age, immunocompromised status should be questioned.

We report a case of an 18-year-old man with no relevant medical history apart from chicken pox in his childhood and allergic rhinitis, with an up-to-date vaccination plan. He was admitted to the ER with 3-day history of *herpes zoster* involving the maxillary and mandibular branches of the trigeminal nerve accompanied by right hemifacial burning pain and otalgia. On physical examination multiple perioral irregular shallow ulcerations and crusts were observed, extending to the ipsilateral auditory canal, as well as painful cervical adenopathies. Oral mucosa also presented with ipsilateral gingivostomatitis. Initial investigation for herpes simplex, human immunodeficiency virus and hepatitis were all negative and lymphocyte populations were also normal. VZV IgG was over 4000 mIU/ml. Computed tomography showed polysinusopathy and adenopathies. Stomatology observation suggested bacterial superinfection and therefore he completed a 7 day course of intravenous Acyclovir, Ceftriaxone and Clindamycin with healing of lesions seen in day 2 of treatment. He showed remarkable improvement with no signs of recurrence in the 3 months follow-up period.

We present a case of an atypical manifestation of shingles in a young immunocompetent patient, affecting maxillary and mandibular branches with auditory canal involvement that requires prompt treatment to avoid severe complication. Even though no forms of immunosuppression were found in our initial study, continuous follow-up is imperative.

Keywords: *Herpes zoster, shingles, unilateral vesicular lesions, trigeminal nerve, young man*

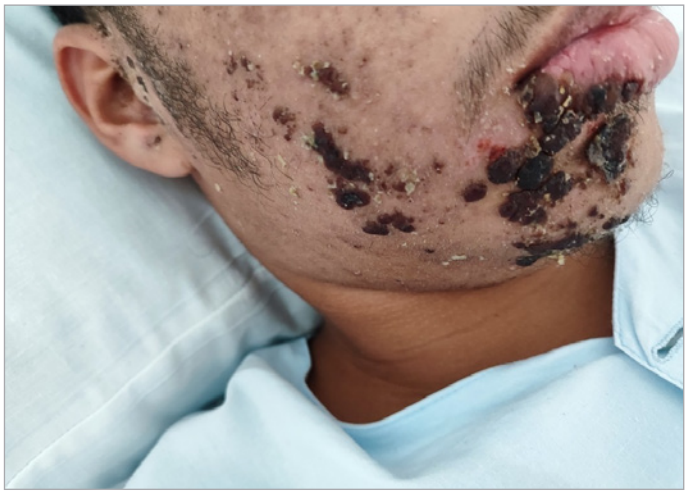

Figure 1. Skin rashes with crusting.
This image shows the ulcerations affecting the maxillar and mandibular branches with auditory canal involvement on a healing phase with crusting.

[Abstract:1617]

CHRONIC PROSTHETIC JOINT INFECTION: COMPARATIVE ANALYSIS BETWEEN PATIENTS TREATED WITH DAIR VERSUS ONE OR TWO-TIME REPLACEMENT

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[2] Infectious diseases, Hospital General Universitarioa de Albacete, Albecete, Spain

[3] Hospital General de Cartagena, Cartagena, Columbia

Management of PJI almost always requires the need for surgical intervention and prolonged courses of antimicrobial therapy. Our goal is to analyse the surgery selected in each patient with chronic infection and analyse the evolution according to the aforementioned surgery.

Materials and Methods: A retrospective observational study has

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been carried out with patients with a late and chronic infection (53), out of which 23 underwent cleaning with retention of implant (DAIR)as a surgical technique, compared to the 29 patients who underwent prosthesis replacement in 1 or 2 stages. Within this population, a bivariate analysis was carried out.

Results: Related to the 22 patients treated with DAIR, the average stay was 16 days, with an average of 10.86 days of intravenous treatment. Those who were treated by other surgery had an average stay of 20.31 days and an average of 10.00 days of intravenous treatment. Treated patients with DAIR had a mortality rate, dated in the first 30 days, of 13.65% which might be compared to 5.7% of treated patients with another surgical technique. Regarding therapeutic failure and non-cure cases, 63.6% of treated patients with DAIR did failure compared to 13.3% of treated patients with another technique, being these results statistically significant with a p<0.001 and OR of 11.37 (CI 2.9-44.5).

Conclusions: Several studies reflect the surgical indication of DAIR in patients with early PJI. With the results depicted in this report, the performance of DAIR just for indicated patients is well supported since it is associated with greater therapeutic failure.

Keywords: *prosthetic joint infection, DAIR, two stages*

[Abstract:1623]

BACTERIEMIAS DETECTED IN THE EMERGENCY DEPARTMENT. EPIDEMIOLOGICAL AND SURVIVAL DATA

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Purpose: To describe the epidemiological characteristics of patients diagnosed with bacteraemia by the Emergency Department.

To verify whether they were notified after microbiological isolation results. To detect the infectious focus and the most prevalent microorganisms.

Methods: Retrospective descriptive study of patients with positive blood cultures obtained in the Emergency Department and who were discharged during 2023.

Findings: 26 bacteraemia were detected; 60% male, mean age 68 years. Most were Gram negative (80%), - *E. Coli* (46%) and *E. Coli* BLEE (20%)-. Urine was the main focus. The origin was not detected in 50%. Once the focus and microorganism were known and the patients were notified, 33% of the cases were admitted at a later date. An escalation strategy was chosen in 15%, treatment was maintained in 75% and de-escalated in 10%. Mortality at 6 months was 10%.

Conclusions: It is essential to request appropriate cultures according to the clinical manifestations. In our young patients without pluripathology, oral treatment did not cause therapeutic failures or complications over time, contrary to the guidelines. In patients with Gram-negative isolation, the success rate with treatment without needing hospitalization was high. Empirical treatment from the emergency department is satisfactory in most cases, requiring an extension of the treatment duration for a few more days after the results of the antibiogram are known.

Bibliography:

Bacteriemia en pacientes adultos dados de alta en el servicio de urgencias. E. Laín, C. Toyas, F.J. Castillo, J. Povar, M.C. Villuendas, A. Rezusta. SEMERGEN, 2019;45(7);467-473.

Keywords: *bacteriemia, emergency department, cultures, Gram negative*

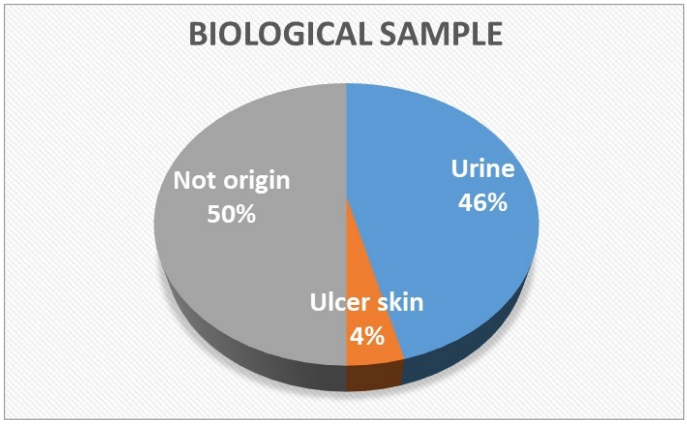

Figure 1. *Biological sample.*

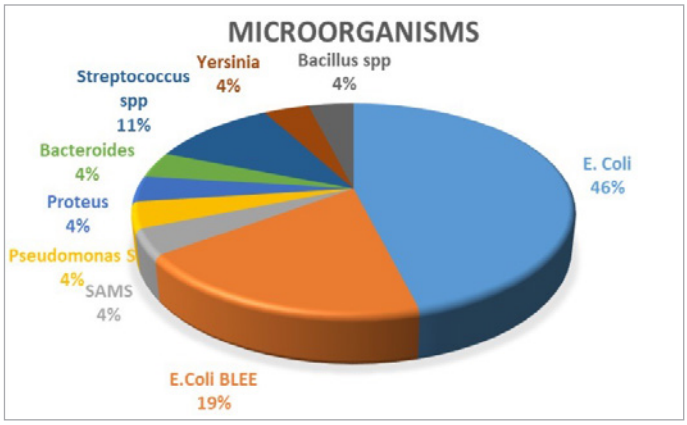

Figure 2. *Microorganism.*

[Abstract:1624]

BACTERAEMIA IN A REGIONAL HOSPITAL. COUNSELING BY THE ANTIMICROBIAL USE OPTIMIZATION PROGRAMS (PROA) TEAM

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Purpose: To know the characteristics of patients diagnosed with bacteraemia in our centre. To verify whether the counselling by the Antimicrobial Use Optimization Programs (PROA) team is

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being carried out. To detect the origin of the infectious focus and the most prevalent microorganisms.

Methods: Retrospective descriptive study analysing the medical records of patients in whom microorganism growth was observed in blood cultures in 2023.

Findings: 128 bacteraemia were diagnosed; 66% male, mean age 78 years. Internal Medicine service reported the most cases (63%), followed by the Emergency Department (20%) and General Surgery (15%). Most of the microbiological isolated were Gram negative (*E. coli* 25%), followed by Gram-positive (methicillin-sensitive *S. aureus* -SAMS- stood out in 10%). Urine was the main focus, whereas in 57% of the cases the origin was not detected. After culture results, escalation strategy was decided in 47%, treatment was maintained in 37% and de-escalated in 16%. The readmission rate in the following 6 months was approximately 40%. Mortality during admission was 24%, at 1 month 28% and at 6 months 43%, respectively.

Conclusions: Patients with bacteraemia constitute an important health care burden in our service. It is essential to request urine culture with symptoms suggestive of bacteriemia. The PROA team should be a priority. The pluripathology of patients marks short- and medium-term survival. Mortality is very high.

Bibliography:
Rodríguez-Baño J, Paño-Pardo JR, Alvarez-Rocha L, Asensio A, Calvo E, Cercenado E, et al. Antimicrobial use optimization programs (PROA) in hospitals.

Keywords: *bacteriemia, Gram negative, PROA*

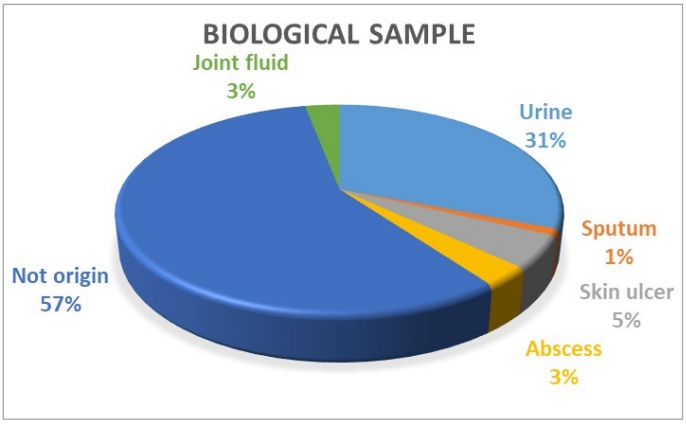

Figure 1. *Biological sample.*

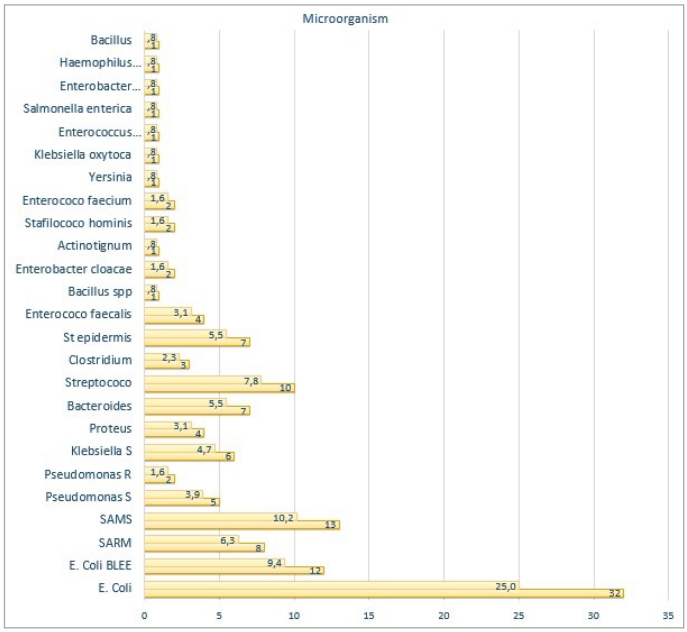

Figure 2. *Microorganism.*

[Abstract:1631]

MORTALITY IN SEPSIS ASSOCIATED WITH *CLOSTRIDIOIDES DIFFICILE* INFECTION: A PROPENSITY-SCORE MATCHED ANALYSIS

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Purpose: Clostridioides difficile infection (CDI) is associated with high mortality, partly attributed to comorbidities[1]. We aimed to assess whether sepsis due to CDI leads to worse outcomes compared to sepsis from other infections.

Methods: In this secondary analysis, all patients with confirmed symptomatic CDI, screened for inclusion in two observational multi-centre studies (NCT03342404, NCT02573571) were compared with 3420 patients with sepsis of other cause enrolled in the registry of Hellenic Sepsis Study Group [community acquired pneumonia (CAP), hospital-acquired or ventilator-associated pneumonia (HAP/VAP), intra-abdominal infection (IAI), and primary bloodstream infection (BSI)]. Comparators were matched 1:1 with CDI cases, based on Charlson comorbidity index (CCI) and Sequential Organ Failure Assessment (SOFA) score. Sepsis was classified by the Sepsis-3 definitions. The primary outcome was 28-day mortality.

Findings: We analysed 549 patients (132 with CDI, 128 CAP, 74 HAP/VAP, 117 IAI and 98 BSI). Propensity scores did not differ in any of the four matched comparisons. Overall, mortality by CDI was 29.5% and it was similar to mortality of sepsis attributed to other infections CDI (29.5% vs 27.1%, odds ratio 0.89, 95% confidence intervals 0.58-1.37; p=0.579). Mortality by CDI was

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similar to any of the other infections, namely CAP (mortality 21.9%, p=0.202), IAI (23.9%, p=0.390) and BSI (26.5%, p=0.659). A trend towards difference was noted with HAP/VAP (41.9%, OR1.72, 95%CI 0.95-3.11; p=0.092).

Conclusions: Among patients of similar severity and comorbidity burden, CDI sepsis displays similar mortality to sepsis from other origin.

References:
1.Boven A et al. Clin Microbiol Infect. 29:1424-1430, 2023

Keywords: *sepsis, Clostridioides difficile, mortality*

[Abstract:1639]

GIANT PULMONARY CYST IN A PATIENT FROM MOROCCO

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22-year-old male from Morocco (Assi), in Spain for 1 year and two months. He is currently in foster care in Madrid. No family or personal history of interest. He lived in a rural environment with close contact with dogs and sheep since his childhood.

The patient came to the emergency room due to intermittent chest pain, predominantly left-sided, that had been going on for a year and had worsened in recent months, associated with mild hemoptysis in the last 72 hours.

Normal constants and physical examination without notable findings. Analysis with blood count, liver profile and reactants in range. A chest X-ray was performed that showed a lobulated tumour with smooth margins projecting onto the upper field of the left hemithorax with extrapulmonary semiology of posterolateral dependence. A chest CT study was completed, showing a unilocular cystic lesion in the left upper hemithorax, without solid poles, which could be related to pulmonary hydatid disease.

The study was completed with an abdominal ultrasound that did not show liver involvement. *E. granulosus* serology was performed, which was negative. Treatment is started with albendazole 400 mg every 8 hours and praziquantel at a dose of 50 mg/kg/day and thoracic surgery is discussed for surgical intervention who perform cyst-pericystectomy + capitonation of the ULL by posterolateral thoracotomy with pleural seeding as a complication.

The PCR of the surgical sample was positive for *E. granulosus*.

After surgery, combined treatment (albendazole + praziquantel) was restarted and is currently being maintained (week 2 after surgery).

Keywords: *pulmonary hydatidosis, treatment, diagnosis*

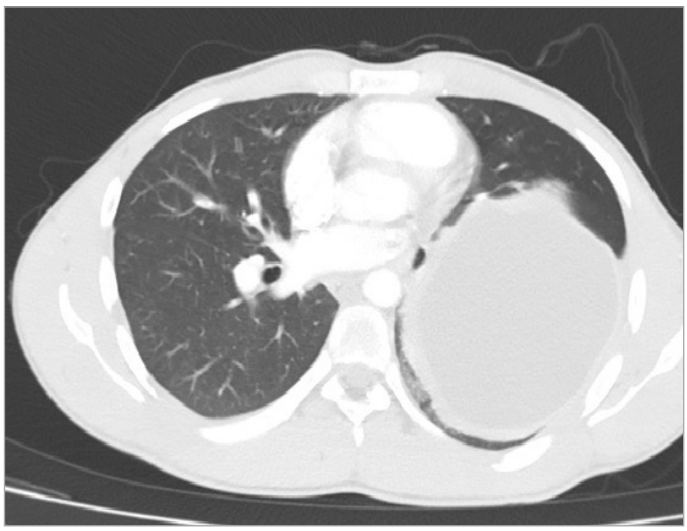

Figure 1. *Chest CT.*

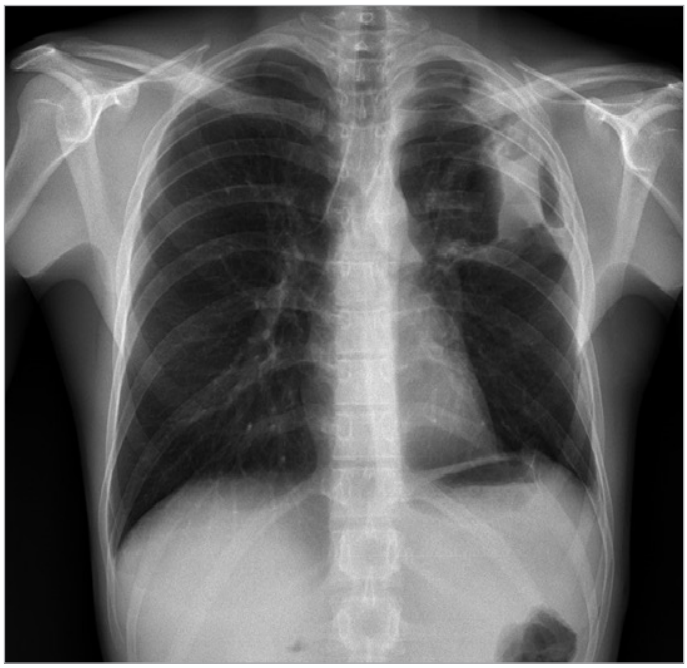

Figure 2. *Chest X-ray after surgical treatment.*

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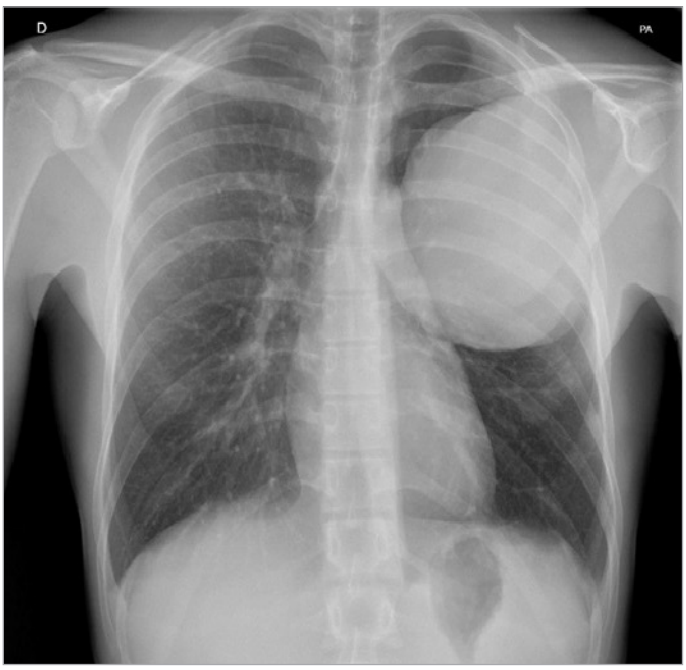

Figure 3. Chest X-ray on admission.

Keywords: *neurocysticercosis, treatment, duration*

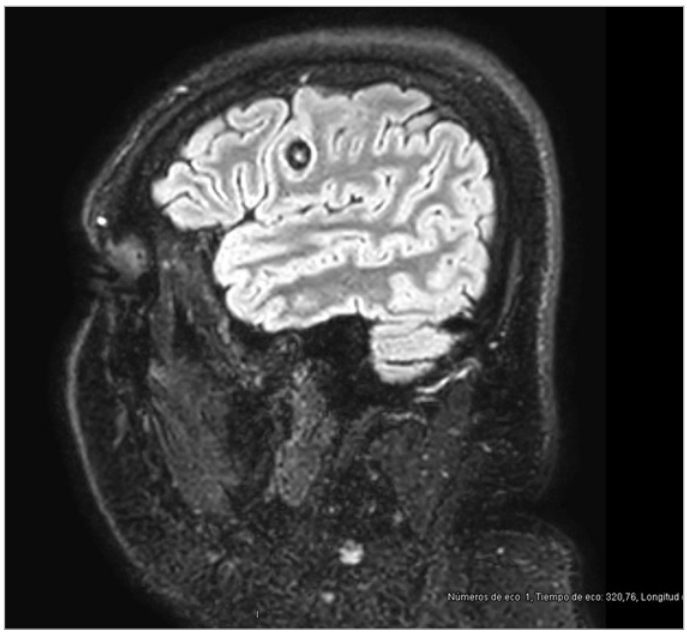

Figure 1. Magnetic resonance.

[Abstract:1642]

NEUROCYSTICERCOSIS: "DURATION DOES MATTER."

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35-year-old woman from Ecuador. Date of arrival in Spain November 2004. Pathological history of interest: neurocysticercosis 5 years ago (she debuted with epileptic seizures and an imaging study showed an image compatible with a diagnosis of neurocysticercosis). She was treated with albendazole for one month. Secondary epilepsy treated with levetirazetam 750 mg every 12 hours. In follow-up in Tropical Medicine outpatient clinics.

A control cranial MRI showed growth of the previous lesion, so it was decided to admit her to hospital for controlled treatment (risk of neurological worsening due to the appearance of cerebral oedema). Constants in range and without acute neurological focality. MRI shows two subarachnoid cystic lesions with a scolex inside it, one anterior interhemispheric and the other right frontal. The latter with growth compared to the previous control.

Rescue treatment was started with albendazole 400 mg/8h and praziquantel 1800mg every 8h (adjusted to weight 50 mg/Kg/day) and dexamethasone 6mg ev every 24h. After 5 days of hospital admission without incident, the patient was discharged from the hospital. On an outpatient basis, it is indicated to complete praziquantel for 30 days and maintain albendazole until the next visit and corticosteroids on a descending schedule.

[Abstract:1651]

A CASE OF PERSISTENT FEVER AND MUCOSITIS IN A 60-YEAR-OLD FEMALE ON METHOTREXATE FOR RHEUMATOID ARTHRITIS, THAT LED TO UNVEILING OF CULTURE-NEGATIVE ENDOCARDITIS

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Purpose: To illustrate the case of a 60-year-old patient, presenting with persistent fever and mucositis attributed to chronic methotrexate administration, but who eventually, proved to have infectious endocarditis due to *Coxiella burnetti*.

Methods: A 60-year-old female with a history of coronary artery disease and rheumatoid arthritis on methotrexate, presented with prolonged fever of approximately 2 months, general malaise, non-bloody diarrhoea and loss of weight. On clinical examination, she appeared to have developed mild mucositis of the oral cavity, explained by chronic use of MTX.

Findings: Lab tests exhibited an elevation of inflammatory markers, while chest and abdominal CTs showed no significant findings. Polymerase chain reaction testing of the stools was positive for norovirus.

Blood cultures and a transthoracic echocardiogram were negative. Leucovorin treatment was administered to reverse MTX toxicity, with subsequent improvement of mucositis and diarrhoea. Due to the persistence of fever and the suspicion for an atypical bacterial infection, further serology testing was obtained.

Coxiella burnetti antiphase II IgG antibody came back positive

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with a titer of 1:1024. Consequently, a transoesophageal echocardiogram was performed, revealing the presence of aortic valve vegetations.
The patient defervesced under doxycycline treatment and was discharged on doxycycline and hydroxychloroquine for 18 months.
Conclusions: Despite the initial improvement of mucositis, the persistence of fever led to further investigations and the unveiling of a chronic infection from *Coxiella burnetti*. Despite the predominant view of focusing on an all-encompassing diagnosis, patients with multiple comorbidities or immunosuppression can present with multiple active medical problems, thus challenging medical professionals.

Keywords: *infectious endocarditis, mucositis, Coxiella burnetti*

[Abstract:1655]

STUDY ON THE ADEQUACY OF ANTIMICROBIAL SURGICAL PROPHYLAXIS AT THE UNIVERSITY HOSPITAL COMPLEX OF CÁCERES

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Objectives: To analyse the adequacy of intrahospital antimicrobial surgical prophylaxis.
Materials and Methods: A cross-sectional, observational, and descriptive study on antimicrobial surgical prophylaxis was conducted. Adequate prophylactic treatment was defined as not only appropriate but also correct in dosage, duration, and route of administration, adhering to current treatment recommendations.
Results: A total of 47 prescriptions for antimicrobial surgical prophylaxis were evaluated. 78.7% of prophylactic prescriptions were classified as adequate; therefore, 21.3% of prescriptions were considered inadequate.
The reasons for inadequate prescription were excessive duration (70% of cases), use of antibiotics not indicated for prophylaxis in 20% of cases and no recommendation for prophylaxis in 10% of cases.
It is noteworthy that the percentage of adequate prophylactic prescriptions over the past year, following the implementation of an Antibiotic Optimization Program (AOP), increased by 28% compared to the previous year's study.
Conclusions: The use of antimicrobials is appropriate in more than half of the cases. In cases where the prescription is inadequate, it is primarily due to excessive duration of surgical antibiotic prophylaxis. The reduction in inadequate prescriptions compared to the descriptive study conducted last year may be attributed to the implementation of the Antibiotic Optimization Program (AOP) and the updating of surgical prophylaxis protocols in our hospital complex. With the results of this study, we have identified one of the main lines of work for an Antibiotic Optimization Program (AOP) in the hospital complex where the study was conducted, including training measures and non-imposing prospective audits.

Keywords: *prophylaxis, antibiotic, optimization*

[Abstract:1661]

THE COMPLICATIONS OF A TEENAGER

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An 18-year-old male presented with low-grade fever, odynophagia, and painful cervical lymphadenopathy with worsening of the condition in the following 5 days with MEG, fever up to 39ºC, arthromyalgase, vomiting, pain in the left side, and choluria; So he goes to the hospital in his town and is diagnosed with possible SD. mononucleosis and discharged. He consulted again 24 hours later due to worsening general condition, persistence of fever, choluria and jaundice, with blood tests showing anemization of 2 haemoglobin points, leucocytosis with lymphocytosis, elevation of GPT and LDH, hyperbilirubinemia and coagulopathy. They request an abdominal ultrasound in which it is described hepatosplenomegaly and splenomegaly of 152 mm. He came again due to worsening in the last 4 days of MEG, fever, choluria and appearance of more lymphadenopathy. An analytical study is performed that confirms haemolytic anaemia with Coombs positive for cold agglutinins (IgM+ C3d+), hepatitis and serology with data of primary EBV infection with cross-positivity for CMV and Mycoplasma. Epidemiological history: refers several friends with the same symptoms with a friend's diagnosis 2 weeks prior. It does not indicate risky sexual relations. During his admission, anemization in this context with a Hb 9.6 with subsequent good evolution with improvement in haemolysis data. Abdominal ultrasound was repeated with hepatomegaly, without evidence of focal lesions and homogeneous splenomegaly. Given the time of evolution of the symptoms upon arrival, treatment with corticosteroid therapy was not started, opting instead for symptomatic management. He progressively presented a favourable evolution analytical and clinical improvement.

Keywords: *mononucleosis, anaemia, EBV infectious, thrombocytopenia*

[Abstract:1664]

A GLOBAL INSUFFICIENCY: A 72-YEAR-OLD'S SYMPTOMATIC JOURNEY

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A 72-year-old woman with a history of well-controlled hypertension and former smoking presented to the Emergency Department due to months-long fatigue. She exhibited a

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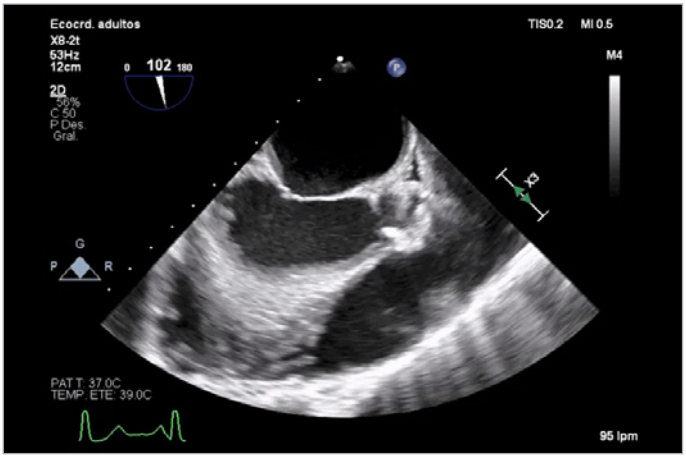
constellation of symptoms, including a 10 kg weight loss over 6 months, nocturnal sweating, and macroscopic haematuria. Physical examination revealed low-grade fever, mucocutaneous pallor, hepatosplenomegaly, and non-blanching violet papular lesions symmetrically distributed on both lower extremities. Laboratory findings indicated altered renal function, hyponatremia, elevated GGT, ferritin, inflammatory markers, and severe anaemia, leading to admission in Internal Medicine for further investigation.

With positive IgG serologies against *Coxiella burnetii* the patient was empirically treated for Q fever with levofloxacin, without clear improvement. Blood cultures identified *Streptococcus gallolyticus/bovis*, prompting colonoscopy revealing early-stage sigmoid neoplasia. A transoesophageal echocardiogram identified vegetations on the aortic valve causing severe aortic insufficiency. Pulmonary valve images suggested severe pulmonary acute insufficiency and atrioventricular valves exhibited severe mitral regurgitation and tricuspid regurgitation with severe pulmonary hypertension. The patient underwent valve replacement surgery and postoperatively experienced complete heart block requiring a pacemaker. Upon discharge, echocardiography revealed normally functioning prostheses, a mildly to moderately dilated left ventricle with moderate to severe global systolic dysfunction (ejection fraction 38%). Despite complications, the patient stabilized, neurohormonal therapy commenced, renal and hepatic profiles normalized, and the pacemaker functioned correctly. Despite lacking histological confirmation, it was presumed that the decline in renal function, haematuria and immunologic phenomena were attributable to poststreptococcal glomerulonephritis secondary to *S. gallolyticus* bacteraemia, resolving after targeted antibiotic therapy.

Keywords: *fatigue, low-grade fever, hepatosplenomegaly, Streptococcus gallolyticus, vegetations*



Video 1. *ETE. Thickening of the right and left aortic valve leaflets is observed, along with an image consistent with two vegetations on the aortic valve. One, of significant size (14x7mm), located on the left coronary cusp, is rounded, while the other, filamentous (14mm), is situated on the right coronary cusp. These findings contribute to severe aortic insufficiency (IAo).*
https://youtu.be/zAfVBi1V8pw

[Abstract:1673]

FEVER COMING FROM THE TROPICS

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We present a 60-year-old man with no personal history of interest who comes to the Emergency Department with fever for the last 10 days. He also reported odynophagia and an exanthematous chest rash without palmoplantar involvement.

The patient went to Colombia a month ago for holidays mainly in urban areas. The last week the symptoms started, and a rapid test for Dengue and SARS-CoV-2 were performed being negative. He denied toxic substances use, unprotected sex, nor raw products consume. Physical examination revealed erythema in the chest, erythematous throat and many insect bites.

The following microbiological study was made: PCR for SARS-CoV-2, thick and thin blood smears with rapid test for Plasmodium, serology for arvoviriasis (Dengue, Chikungunya and Zika), *Treponema pallidum*, Borrelia and Coxiella serologies were all negative. The study for HCV, HSV, CMV, EBV, HAV were also negative. As positive, we found out *Mycoplasma pneumoniae* compatible with past disease and HIV serology, with viral load >10.000.000 cp/ml. Therefore, triple therapy (Biktegravir/Tenofovir alafenamide/Emtricitabine) was immediately started. The patient admitted to have had an unprotected sex, being probably the source of infection.

HIV primoinfection can appears as a mononucleosis syndrome with nonspecific symptoms in up 15% of infections. In 50-70% of cases, 2-10 weeks after infection, a mononucleosis syndrome appears with generalized lymphadenopathy, fever, odynophagia, maculopapular rash or mucosal ulcers.

Our case highlights the importance of an adequate anamnesis in the patient returning from the tropics, as well as including in the differential diagnosis cosmopolitan diseases, including different sexually transmitted infections.

Keywords: *HIV, fever of unknow origin, sexually transmitted infections*

[Abstract:1686]

DISSEMINATED INTRAVASCULAR COAGULATION AND PULMONARY EMBOLISM: A RARE MANIFESTATION OF VISCERAL LEISHMANIASIS

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Summary: Visceral Leishmaniasis (VL) is an endemic disease in several Eastern Mediterranean countries, such as Greece. Symptoms include fever, weight loss, paleness, and hepatosplenomegaly. Disseminated intravascular coagulation

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(DIC) rarely occurs in VL due to tissue factor overexpression.

Purpose: A case report of a patient presenting with pulmonary embolism and laboratory findings of DIC.

Methods: A 73-year-old Greek male patient with a history of heart failure, chronic myelomonocytic leukaemia, sleep apnoea and bipolar disorder, was assessed in emergencies due to progressively worsening dyspnoea, hypoxemia and fatigue for several days.

Findings: Physical examination revealed coarse bilateral crackles, tachycardia, hepatosplenomegaly, oedema of lower extremities and fever up to 39°C. The patient lived in an urban setting and reported no previous travels or contact with animals. Blood tests showed increased inflammation markers, elevated AST/ALT, hypergammaglobulinemia, and DIC based on prolonged coagulation time, high D-dimer, and low platelet counts (4.000 k/µl). An emergency CTPA was performed, visualizing pulmonary embolism of the right main pulmonary artery branches. Peripheral blood smear showed no progression of his haematological neoplasm and hepatosplenomegaly confirmed by abdominal ultrasound. Serology testing revealed IgM+IgG for Leishmania antibodies. Consequently, a bone marrow biopsy was performed, and PCR for Leishmania was found positive, confirming the diagnosis of VL.

Conclusions: VL might rarely be the cause of a DIC-induced hypercoagulable state that can be further complicated by a major thrombotic event such as pulmonary embolism. Despite the rarity of such an event, VL should be included in the differential diagnosis of DIC-induced thrombosis, particularly in endemic regions.

Keywords: *visceral Leishmaniasis, pulmonary embolism, DIC*

[Abstract:1687]

FEVER AND PURPURIC RASH

Irene Gil Hernando[1], *Alba Maria García Alabarce*[1], *Antonio Torres Gómez*[2], *María Teresa López Plana*[1]

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[2] Department of Internal Medicina, Hospital Universitario San Agustín, Linares, Spain

A 73-year-old patient with arterial hypertension and endometrial adenocarcinoma in 2019 treated with surgery and radiotherapy was admitted to the emergency department with intense dyspnoea and fever of up to 40°C. Physical examination revealed hypotension (BP 70/50 mmHg), oligoanuria, tachypnoea at rest, inadequate distal perfusion, bradykinesia, bradylalia and non-palpable purpura on the trunk and lower limbs that did not disappear with vitopressure (Figure 1 and 2). Laboratory tests detected renal failure with creatinine of 1.95 mg/dL, elevated acute phase reactants with CRP of 129 mg/L and procalcitonin >100 ng/mL, metabolic acidosis with pH 7.23 and bicarbonate of 16 mmol/L and lactacidemia of 11.4 mmol/L. Angio CT ruled out pulmonary thromboembolism or pulmonary infiltrates.

Pending the aetiology of the septic shock, the patient was admitted to the Intensive Care Unit (ICU) for requiring high-flow nasal oxygen therapy (HFO) and vasoactive drugs due to haemodynamic instability. The patient continued with bradycardia and bradylalia, so a lumbar puncture was performed with isolation of *Neisseria meningitidis* by molecular PCR technique. A Gram-negative diplococcus corresponding to group B meningococcus grew in the blood culture. The patient was diagnosed with meningococcal septicaemia caused by *Neisseria meningitidis*. During her stay in ICU she required orotracheal intubation.

The purpuric lesions spread over the entire body surface with the appearance of new pustular lesions and blisters suggestive of septic emboli. The blistering lesions and erosions resulted in acral necrosis of both feet (Figure 3), requiring amputation of the left foot in the following months.

Keywords: *non-palpable purpura, eningococcal septicaemia, fever*

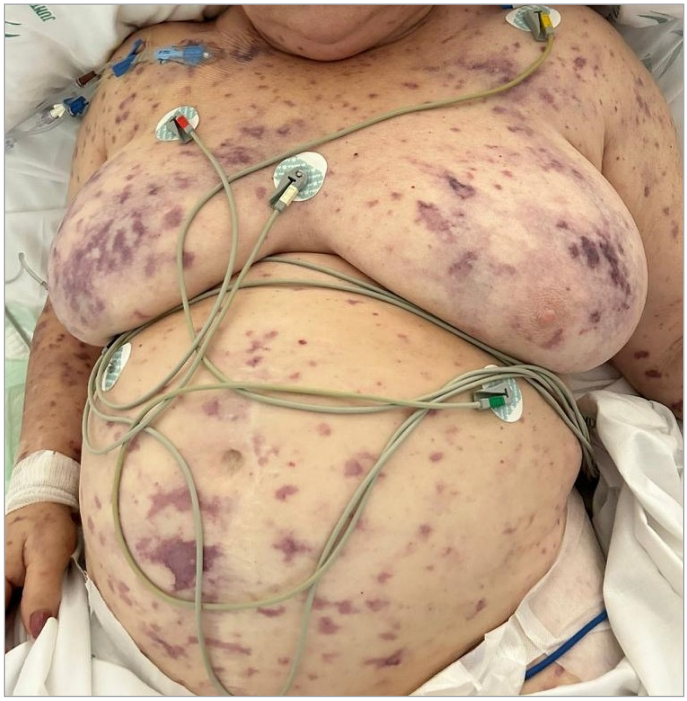

Figure 1.

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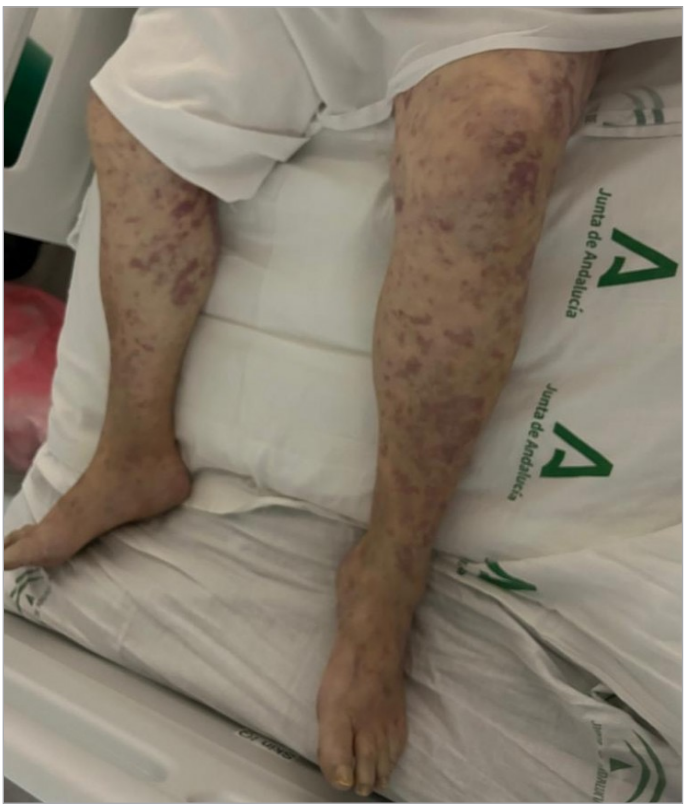

Figure 2.

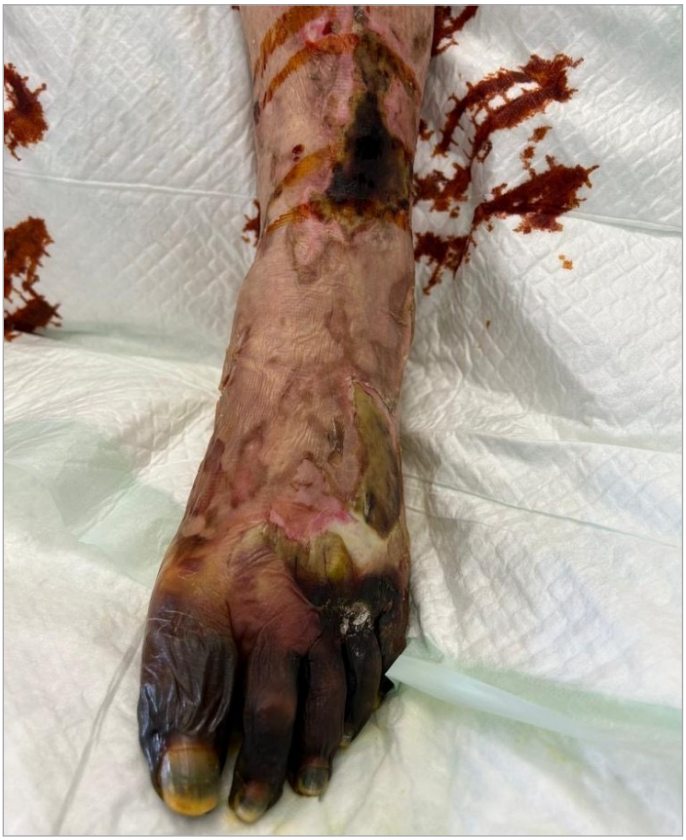

Figure 3.

[Abstract:1705]

SMALL RNA SEQUENCING ANALYSIS OF DIFFERENTIALLY EXPRESSED MICRORNAS IN PEOPLE LIVING WITH HIV

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Background: There is an increased intestinal microbial translocation and systemic immune activation in people living with HIV (PLWH). Micro-RNAs (miRNAs) can regulate virus activity or modulate immune response.

Objectives: To assess the differential analysis of miRNAs that modulate systemic inflammation in PLWH, classified in two groups: those with active viral replication and those others with undetectable viral load.

Methods: Healthy controls (HC, n=10) and two groups of PLWH were evaluated: untreated PLWH (G1, n=16) and treated PLWH, with prolonged undetectable viral load (G2, n=18). miRNAs expression was evaluated by small RNA-seq. Comparison between groups were analysed by Mann-Whitney U test.

Results: Compared with HC, G1 overexpressed miRNAs implicated in the regulation of inflammatory and immune response, via NF-κB (hsa-miR-129-5p and hsa-miR-129-2-3p) or targeting TLR4 (hsa-miR-218-5p). hsa-miR-133a-3p, implicated in atherosclerosis progression, was also overexpressed. On the contrary, hsa-miR-1246, implicated in stimulation of angiogenesis pathways by activating P53 and DYRK1A, was under expressed.

In G2, hsa-miR-18a-5p, involved in Th17 cell gene expression program, and hsa-let-7i-3p, implicated in modulation of IL-10 expression, were overexpressed. Conversely, unlike untreated PLWH, PLWH with undetectable viral load present a decreased expression of miRNAs involved in inflammation, either through TLR4 (hsa-miR-6891-5p and hsa-miR-584-5), or through FOXA2/IL13 (hsa-miR-629-3p).

Conclusions: In untreated PLWH, a predominance of miRNAs implicated in inflammation and atherosclerosis, and a decrease in those involved in angiogenesis, are detected. In treated patients, a lower expression of miRNAs implicated in inflammatory processes are observed. These data are a new factor in favour of the treatment of PLWH.

Keywords: *miRNA, HIV, inflammation, atherosclerosis*

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[Abstract:1706]

INTERVENTION STUDY IN PATIENTS ADMITTED FOR COMMUNITY-ACQUIRED PNEUMONIA

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This study addresses community-acquired pneumonia (CAP) as the leading cause of infectious mortality and the fourth global cause of death. The annual incidence in Spain ranges from 2 to 10 cases per 1,000 inhabitants. The study aims to identify predictor variables for poor prognosis in patients hospitalized with CAP to enhance health outcomes.

Conducted in a regional hospital, the research excluded cases of CAP due to aspiration and mycobacteria. Various variables were analysed, including the use of ventilatory support, microbiological tracking, radiological pattern, and antibiotic therapy according to the intrahospital guide. Demographic data, comorbidities, and other factors were also considered. In total, 47 patients were included in the study, with a male predominance (53.2%) and an average age of 73 years.

The most common comorbidities included prior dependency, chronic heart failure, previous admission within a year, alcoholism, type 2 diabetes mellitus, and smoking. The alveolar radiological pattern was predominant upon admission. Complications identified during hospitalization included congestive heart failure, altered mental status, and acute renal failure.

Although high adherence to empirical antibiotic therapy and adequate microbiological tracking were observed, risk factors for CAP admission were highlighted, such as prior dependency and a history of chronic heart failure. The majority of hospitalized patients presented an alveolar radiological pattern and primarily required ventilatory support through nasal cannula. The most common complications included decompensated heart failure, altered mental status, and acute renal failure, with ICU admission being infrequent.

Keywords: community-acquired pneumonia, empirical antibiotic therapy, risk factors

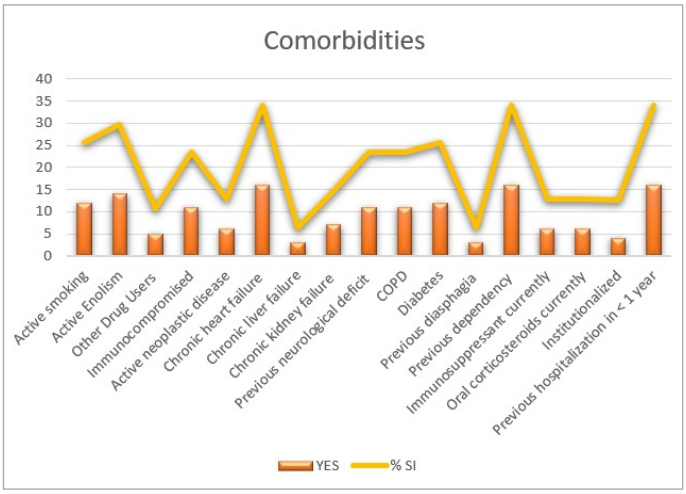

Figure 1. Comorbidities.

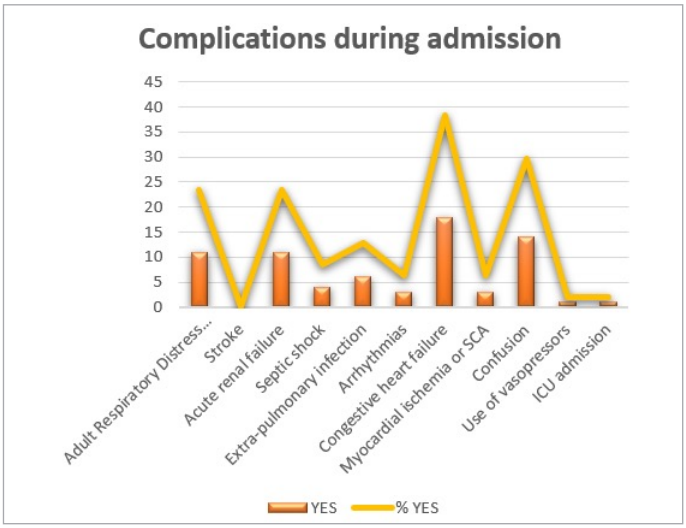

Figure 2. Complications during admission.

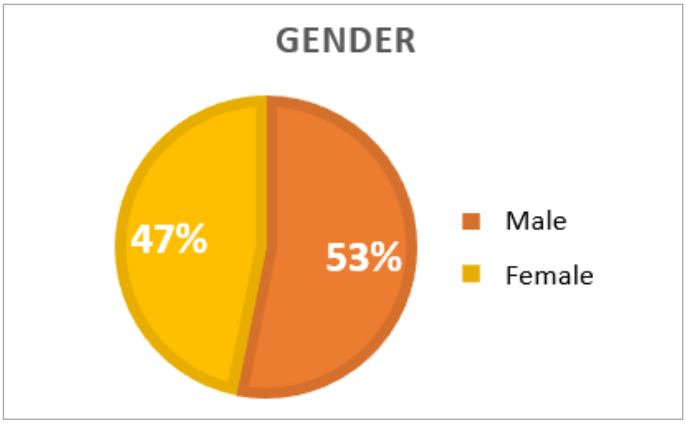

Figure 3. Gender.

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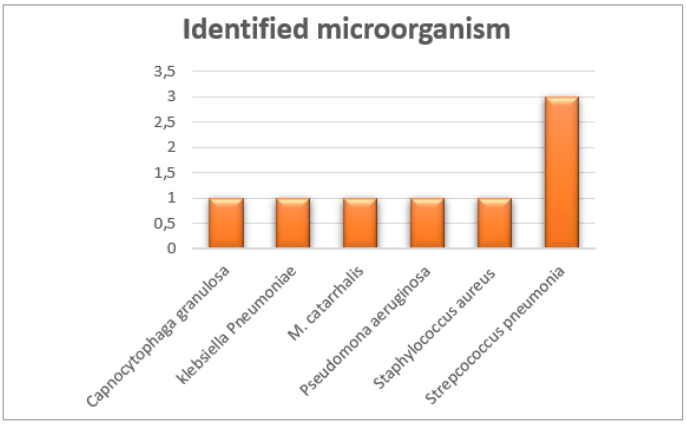

Figure 4. Identified microorganism.

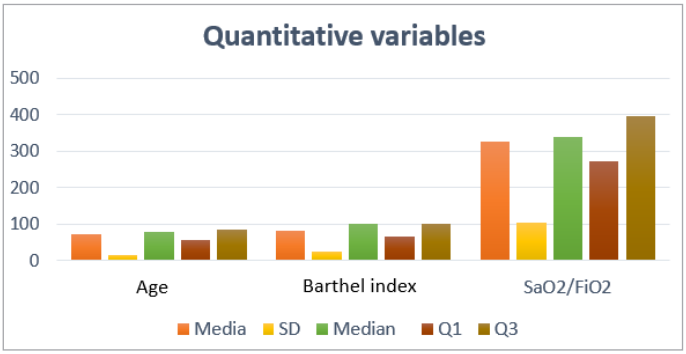

Figure 5. Quantitative variables.

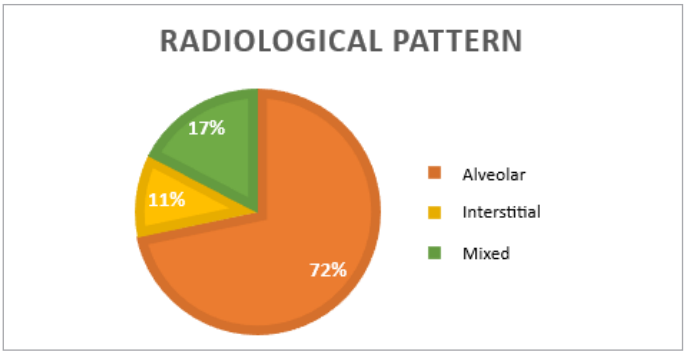

Figure 6. Radiological pattern.

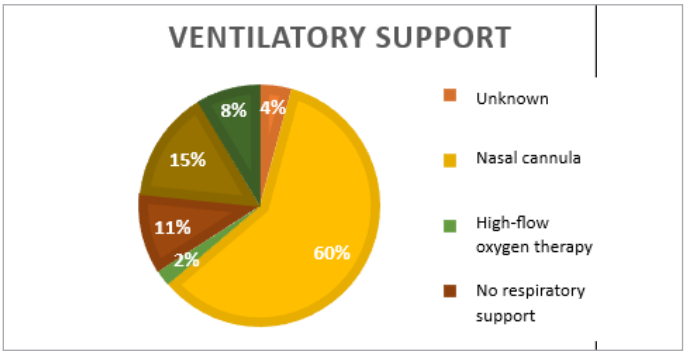

Figure 7. Ventilatory support.

[Abstract:1721]

A COMPARATIVE STUDY IN HIV PATIENTS IN A TOURISM AREA DURING ONSET SARS-COV-2 PANDEMIC

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The aim of the study is to know if there are differences between age groups, antiretroviral treatment (ARVt) changes and development of CD4+ lymphocytes amount. We retrospectively analysed the medical records in a specialized HIV consultation between years 2020 and 2022. Demographic, laboratory and medical history variables were obtained. As search results, from the 100 patients were included, 83% were men, 48,53 was the age average, with via sexual transmission in a 93%. On the onset, CD4+ numbers' mean was 350.74 cells/μL with an evolution of: 843.53 (2020) and 661.01(2022) cells/μL. There was a prevalence of dyslipidaemia (67%), cardiovascular events (12%) and cancer (11%). And even toxicity in relation to ARVt were describe like neuropsychiatric (27%) and cardiovascular risk factors (15%). A 39% of patients require ARVt change in a couple of years. Contrasting studies in 2 age groups, there are a prevalence in people over 46 of dyslipidemia and the use of Darunavir/cobicistat (DRV/c)/FTC/TAF (p=0,031). In 4 age groups, it highlighted more hospital admissions in over 60 years than the previous age group (p=0.022). The treatment forgets have a significant statistical correlation with detectable viral load (p=.047). There is a variation in 2 years of +548.40 cells/μL in HIV patients with BIC/FTC/TAF (p=0.047).

We need to take preventive actions against the via sexual transmission and also the great cardiovascular risk in relation to HIV and ARVt in middle-aged patients. Starting investigations about reminder tools to minimize treatment forgets. BIC/FTC/TAF has shown a greater effect in rising CD4+ numbers.

Keywords: HIV infection, antiretroviral treatment, development CD4+ lymphocytes, ages groups, tourism area, SARS-CoV-2 pandemic

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ARV Study	DTG/ 3TC	FTC/TA F	RAL *	EVG*/c/F TC/TAF	DTG/ ABC* /3TC	DTG	FTC/RPV* /TAF
				p			
ARV change in 2 years	0,000 0002	0,037		0,013		0,003	
Detectable viral load in relation to drugs		0,03	0,001				
Greatest cardiovascular events in relation to drugs				0,036			
Hospital admissions in the last 5 years					0,024		
Cancer							0,041

Table (1) *RAL=Raltegravir; EVG=Elvitegravir; ABC= Abacavir and RPV= Rilpivirine

Table 1. *Comparative study between antiretroviral treatments.*

[Abstract:1723]

RESISTANT VISCERAL LEISHMANIASIS IN A KIDNEY TRANSPLANT PATIENT

Barbara Soler Bonafont[1], *Elizabet Petkova Saiz*[2], *Miguel Gorgolas Hernandez-Mora*[2], *Raquel Bravo Ruiz*[1], *Elia Asensi Diaz*[1], *Paula Asensio Mattheus*[1], *Marina Bernal Palacios*[1], *Alfonso Cabello-Ubeda*[2], *Carlos Soto De Ozaeta*[3], *Ricardo Fernandez Roblas*[4], *Ana Maria Ramos Verde*[5], *Catalina Martin Cleary*[5], *Jesus Hernandez Perez*[5], *Laura Prieto-Pérez*[2]

[1] Internal Medicine Department, University Hospital Fundacion Jimenez Diaz, Madrid, Spain
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A 29-year-old Colombian patient was diagnosed with end-stage kidney disease secondary to Alport syndrome two years before admission. One month after the diagnosis, he underwent dead donor kidney transplantation starting immunosuppressive treatment with tacrolimus, mycophenolate mofetil and prednisone. During follow-up, his renal function worsened (from prior CrCl 1.66 mg/dl after kidney transplantation to CrCl 3.99 mg/dl) having developed bicytopenia (Hb 8.4 g/dl and 34,000 platelets). Both renal and bone marrow (BM) biopsies were then performed, and amastigotes of *Leishmania* spp were observed in both tissues. A polymerase chain reaction (PCR) in bone marrow demonstrated infection by *Leishmania infantum*. A diagnosis of visceral leishmaniasis was established and treatment with liposomal amphotericin B with 3 mg/kg/day dose was started, together with discontinuation of immunosuppressive therapy and resuming haemodialysis therapy. Despite a high cumulative dose of liposomal amphotericin B (4.8 g), cytopenia progressed and splenomegaly of 24 cm persisted. Alternative causes of pancytopenia were considered, and a second BM biopsy was performed showing persistence of *Leishmania* spp amastigotes. Miltefosine 30 mg/8h was initiated and soon discontinued because of gastrointestinal adverse events. Finally, a kidney-failure adjusted scheme with intravenous pentavalent antimonial (10. mg/kg every 3 days of meglumine antimoniate) was introduced. Strict monitoring of potential serious adverse events (such as arrythmias and pancreatitis) was carried out. After 28 days of treatment the three haematological lines improved and fever disappeared. A new BM biopsy was performed, and PCR was now negative for *Leishmania* spp. The patient is now receiving secondary prophylaxis with Glucantime® with close monitoring to detect recurrence of visceral leishmaniasis.

Keywords: *visceral leishmaniasis, renal transplantation, liposomal amphotericin B, pentavalent antimonial, splenomegaly*

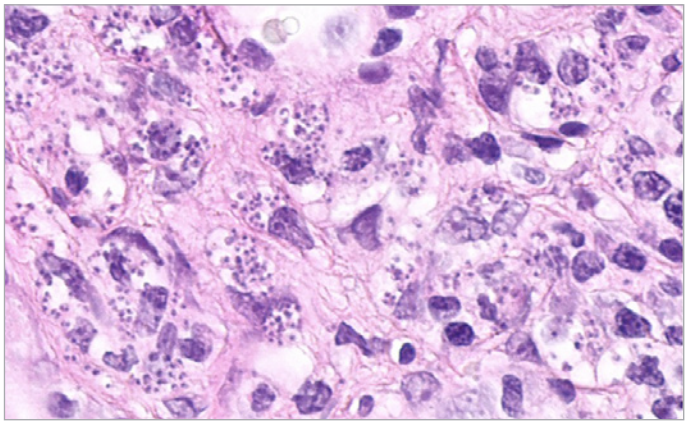

Figure 1. *Renal biopsy. Leishmania spp amastigotes visible in interstitium and in macrophag cytoplasm.*

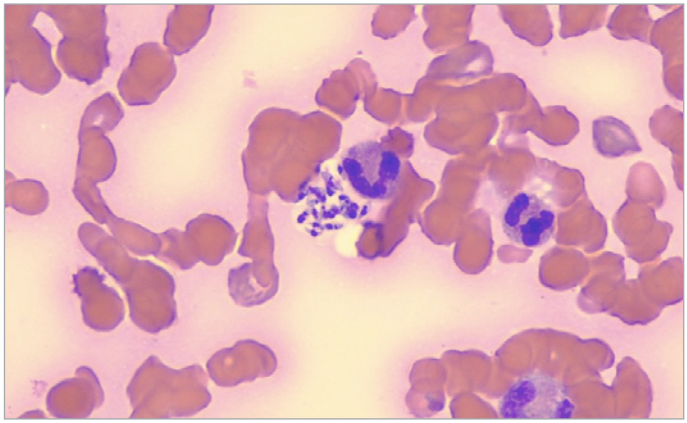

Figure 2. *Bone marrow aspirate. Images consistent with Leishmania spp amastigotes were observed inside histiocytes.*

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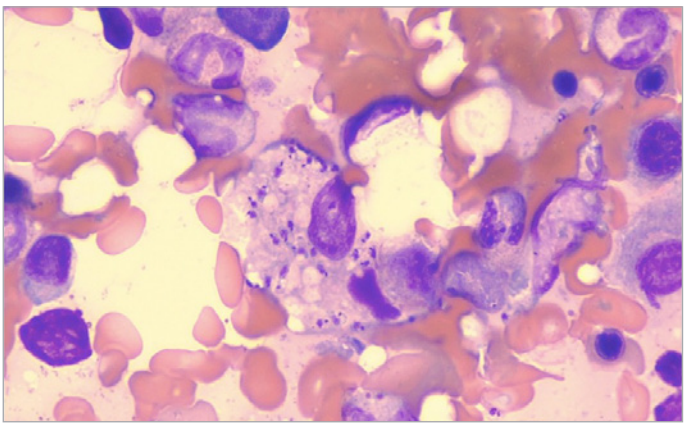

Figure 3. Bone marrow aspirate. Images consistent with Leishmania spp amastigotes were observed inside histiocytes.

[Abstract:1734]

TRAVEL-RELATED FEVER AND RASH: DENGUE FEVER

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Introduction: Dengue fever is a type of endemic viral infection that is transmitted by Aedes species mosquitoes, may present with asymptomatic and severe forms that can progress into multiple organ dysfunctions.

Case Presentation: A 28-year-old female patient admitted with a complaint of high fever, which decreased and rose again with antipyretics. He had a travel history to Egypt 1 week ago. On physical examination, the temperature was 39°C, the pharynx was normal, and there was a widespread scarlatiniform rash on the extremities and trunk. The Tourniquet test was positive. In laboratory examinations, WBC 3070 µL, PNL 1900 µL, Lymphocyte 970 µL, PLT 141000 µL, AST 70 µL, LDH: 371 µL, CRP: 12.2 mg/L. Malaria rapid antigen and smear tests were negative, HIV, Toxo, CMV, Rubella, Parvovirus, Influenza, SARS CoV2, RSV, Adenovirus, Streptococcus, and Chikungunya tests were negative. The patient was evaluated for endemic infectious diseases. Dengue haemorrhagic fever IgM and RT PCR tests were positive. Regular paracetamol, hydration and supportive treatment were provided. The patient was closely monitored since some patients may progress into severe haemorrhagic conditions. The patient was discharged with full recovery.

Conclusions: Diagnosis is of great importance as dengue fever may be severe in 5% of patients and the risk of mortality in undiagnosed severe cases is 50%. Detailed anamnesis should be taken since the patients present with nonspecific findings such as fever, headache, retro-orbital pain, myalgia, and arthralgia. For the patients with recent travel history, it is very important to include endemic diseases in the differential diagnosis.

Keywords: dengue fever, endemic disease, infection

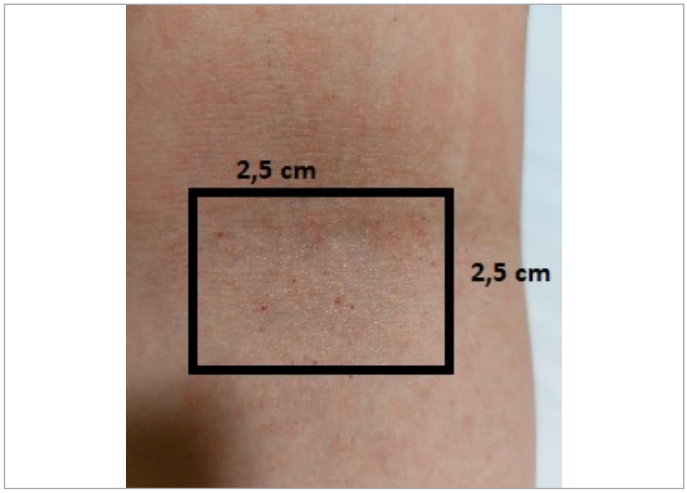

Figure 1. Tourniquet Test. The test is positive if there are more than 10 petechiae in the field.

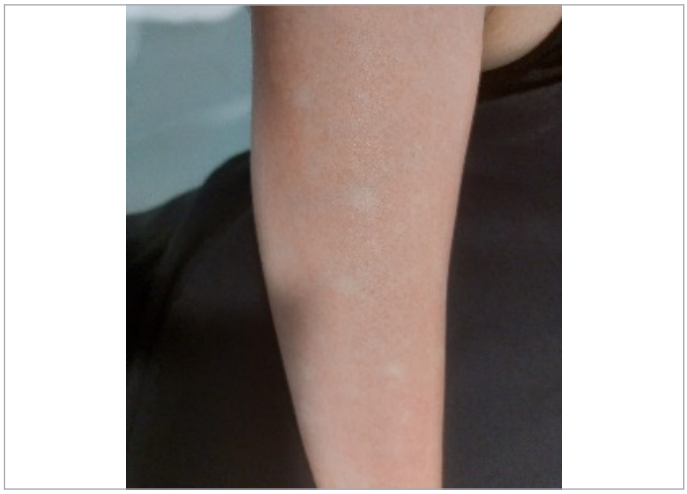

Figure 2. White islet in the Red Sea. Skin manifestation in Dengue fever.

[Abstract:1774]

CEREBRAL TOXOPLASMOSIS – A FORGOTTEN DIAGNOSIS

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Introduction: Toxoplasmosis is a disease caused by the intracellular protozoan parasite, *Toxoplasma gondii*. The prevalence depends on the geographic area. The primary infection in immunocompetent individuals is usually asymptomatic or characterized by the development of mild symptoms with a self-limited course. Latent infection can persist for the life of the host. However, immunocompromised individuals can have reactivation of latent infection.

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Case Presentation: A 71-year-old man, with personal history of multiple myeloma, went to the Emergency Department with generalized abdominal pain and paraesthesia of the upper right limb with 14 days of evolution. The physical examination was normal, with no changes on sensation or proprioception.
Blood tests didn't reveal increasing of the inflammatory parameters. A CT scan of the head was performed and revealed two expansive lesions with peripheral enhancement, suggestive of secondary lesions.
A magnetic resonance of the brain was performed for better characterization, and it suggested that those lesions had a vascular or inflammatory origin, probably secondary to a septic embolus. Serologies were negative.
A CT of chest, abdomen and pelvis was performed as well as a transthoracic echocardiography and the results showed no infectious focus. Due to the persistence of paraesthesia, a lumbar puncture was performed and the DNA of *T. gondii* was detected in the cerebrospinal fluid. The patient initiated targeted therapy and had a full recovery from neurological deficits.
Conclusions: In immunocompromised patients, cerebral toxoplasmosis can be present with focal neurological deficits, without fever or any other symptoms like seizures or headache. Its diagnosis can be challenging.

Keywords: *toxoplasmosis, paraesthesia, latent infection*

[Abstract:1776]

MENINGITIS ASSOCIATED WITH HHV-7 IN AN HIV IMMUNOCOMPETENT ADULT PATIENT: A CASE REPORT

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Human herpesvirus-7 (HHV-7) is a ubiquitous virus that infects children early and is accompanied by lifelong latency. Pathological mechanisms of Central Nervous System (CNS) HHV-7 related infections are still unknown and there is limited literature regarding meningitis associated with HHV-7. We report a 36-year-old male elite controller who had previously been diagnosed with human immunodeficiency virus and treated with dolutegravir/lamivudine; undetectable viral load and CD4+ count greater than 500 cell/ml.
Admitted to our hospital because of general fatigue, fever, headache, and neurological examination exhibited neck stiffness. A cerebrospinal fluid (CSF) examination revealed mononuclear pleocytosis, elevated protein level and glucose consumption; cultures were negative and positivity for HHV-7 DNA was the only strain detected in the CSF analysis.
The patient's condition improved regardless the empirical administration of antibiotics and acyclovir. HHV-7 meningitis in immunocompetent adults is usually uncommon and the clinical relevance of HHV-7 neuroinvasion is unknown.
Little information exists on glucose consumption in HHV-7-associated meningitis, this is one of the few reports.

Keywords: *Human herpesvirus-7 (HHV-7), meningitis, immunocompetent adults*

[Abstract:1796]

HOW LONG DO WE CONTINUE THE EMPIRICAL ANTIMICROBIAL THERAPY IN PATIENTS WITH HAEMATOLOGICAL MALIGNANCIES AND FEBRILE NEUTROPENIA?

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Background: The publication of the How Long Study in 2017 opened the debate on continuation of the empirical antimicrobial therapy (EAT) in haematological patients with febrile neutropenia until neutrophile recovery or withdrawal after 72 h or more of apyrexia plus clinical recovery.
Methods: Episodes of febrile neutropenia in patients of our hospital with haematological malignancies were assessed for retrospective analysis. Between October 1, 2021 and 31 October, 2023, 147 episodes of febrile neutropenia in 102 patients were chosen for analysis. We analysed epidemiological features, haematological malignancies, neutrophil count at the time of febrile neutropenia episode, EAT employed, microbiological diagnosis and antimicrobial resistances.
Results: Gram-negative bacteria were the main aetiology (63.44%), primarily *E. coli* (24%) and *K. pneumoniae* (10%). Only 4% were BLEE and/or AmpC.
Among Gram-positive bacteria (36.54%), *S. aureus* stood out with 5%, none methicillin-resistant. There were only 7% positive blood cultures for *Pseudomonas*, mostly sensitive to ceftazidime, cefepime and piperacillin-tazobactam. The EAT was correct in 87% of the cases and in the majority of cases was not withdrawn after the arrival of the antibiogram, continuing until the recovery of the neutrophil count.
Conclusions: In our hospital area, most cases of analysed bacteraemia in patients with haematological malignancies and severe neutropenia were due to Gram-negative bacteria, in a high percentage without resistance mechanisms (96%). However, EAT must always include broad-spectrum antibiotics if risk factors are detected, without being necessary to cover MRSA.

Keywords: *bacteriemia, febrile neutropenia, haematological malignancies*

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[Abstract:1809]

INVASIVE *STREPTOCOCCUS PYOGENES* INFECTION

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Case Description: 14-year-old male, with no personal history of interest, who is referred to the Hospital Emergency Department for febrilesyndrome of unknown origin of intermediate duration associated with pain and functional impotence of the right upper limb, without previous trauma or clear trigger.

Clinical Hypothesis: In the differential diagnosis we found: muscle involvement (strain, tear, contusion or haematoma), spontaneous diabetic myonecrosis, deep vein thrombosis, compartment syndrome, sarcoma and infections (pyomyositis, septic arthritis, osteomyelitis, clostridial myonecrosis, necrotising myositis, cellulitis and necrotising fasciitis).

Diagnostic Pathways: Laboratory tests showed elevated acute phase reactants and a chest CT scan was requested showing several abscessed collections located from the right supraclavicular region to the proximal third of the arm measuring 17.1x5.2x4.5 cm. In view of these findings, urgent surgical debridement was performed by Traumatology and empirical antibiotic therapy was started with ceftriaxone, clindamycin and cloxacillin. After 4 hours, we were notified by microbiology due to intraoperative culture isolation of *Streptococcus pyogenes*, directing antibiotherapy to sodium penicillin G and clindamycin with very good clinical evolution, without requiring further surgical debridement.

Discussion and Learning Points: Primary pyomyositis is a purulent infection of skeletal muscle arising from a suspected or confirmed haematogenous infection, whereas secondary pyomyositis is caused by localised penetrating trauma or dissemination contiguous to the muscle. Primary infections usually have a subacute onset and most commonly affect the extremities or muscles of the hip and pelvis.

Keywords: *pyomyositis, Streptococcus pyogenes, inflammation*

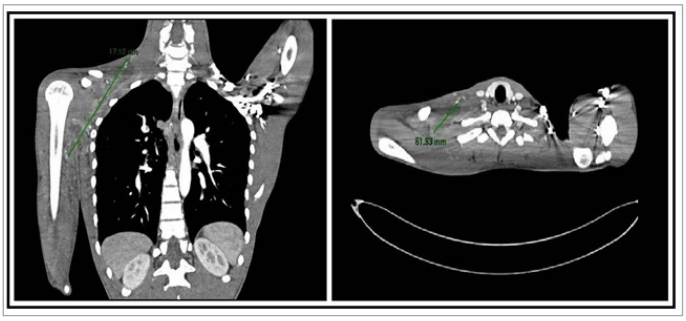

Figure 1. *CT image on admission to hospital. Findings consistent with pyomyositis extending from the right supraclavicular region to the proximal third of the right arm.*

[Abstract:1824]

LEPTOSPIROSIS RELATED ACUTE PANCREATITIS

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Introduction: Leptospirosis is a zoonotic infection caused by spirochetes of the Leptospira genus. It can manifest with a wide range of clinical symptoms. Animals transmit the infection through their urine. Water contamination plays a significant role in transmission.

Case Presentation: A 36-year-old male patient without any comorbidities presented to the emergency department with complaints of abdominal pain and myalgia. On physical examination, body temperature was 36.4°C, blood pressure was 110/60 mmHg. Patient's profession is gardener and irrigation worker. There was no abnormality according to the lung and cardiac examination. Abdominal tenderness was present without abdominal defence and rebound signs. Biochemical parameters; C-reactive protein (232 mg/dl), AST (85 U/L), ALT (61 U/L) levels were elevated. Computed tomography imaging showed an oedematous pattern in the peri-pancreatic region, supporting the diagnosis of acute pancreatitis (Figure 1). Intravenous hydration was initiated. Clinical follow-up revealed a decrease in abdominal pain and C-reactive protein levels. In the clinical setting, when the patient was developed acute pain in the right inguinal region, inguinal ultrasonography was performed, revealing several lymph nodes in the right inguinal fossa. Leptospira PCR (real time) test was requested and the result was positive. Penicillin treatment was started and initiated (4x1.5 mn units) for treatment purposes. The improvement was observed in clinical and laboratory parameters, according to the antibiotic treatment.

Conclusions: Acute pancreatitis is a rare and important result of leptospirosis. Early diagnosis and appropriate treatment significantly affect the clinical course of the disease.

Keywords: *leptospirosis, acute pancreatitis, treatment*

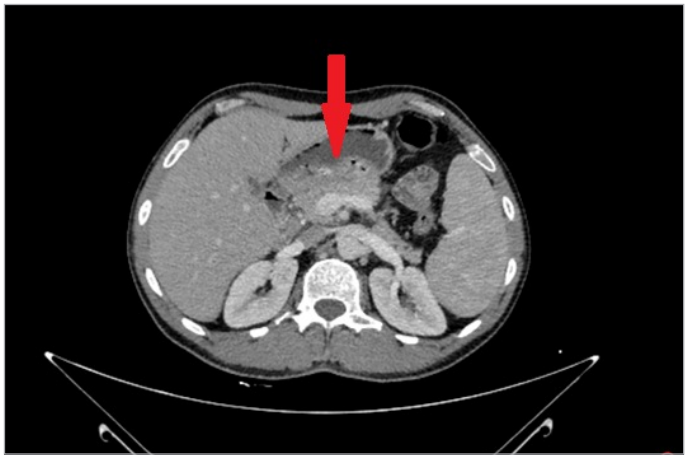

Figure 1. *Oedematous pancreatitis in abdominal CT scan.*

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[Abstract:1827]

REVERSIBLE PULMONARY HYPERTENSION IN A MALE ADULT PATIENT WITH LEPTOSPIROSIS

Aikaterini Triantafyllou, Sara Georgiadou, Stella Gabeta, George Giannoulis, Leonidas Ieropoulos, Dimitrios Vervainiotis, Dimitra Georgia Zikoudi, Asterios Polyzos, George N Dalekos, Kalliopi Zachou

Department of Medicine and Research Laboratory of Internal Medicine, National Expertise Center of Greece in Autoimmune Liver Diseases, European Reference Network on Hepatological Diseases (ERN Rare Liver), General University Hospital of Larissa, Larissa, Greece

Purpose: Leptospirosis is a zoonotic infection caused by serotypes of *Leptospira interrogans*, transmitted to humans by direct contact with infected urine and by indirect exposure to contaminated water or soil. Human leptospirosis has a wide range of clinical manifestations, including mild, asymptomatic infections, as well as serious and life-threatening complications with multi-organ dysfunction, known as Weil's disease. We present a case of icteric Leptospirosis complicated by completely reversible pulmonary hypertension.

Methods: A 45-year-old male, cattleman, with no past medical history, was admitted in our department with abdominal pain and lower limb enemas for the past three days. Physical examination revealed jaundice, pitting enemas of lower extremities, pleural effusion, lower abdominal tenderness and positive hepatojugular reflux test.

Findings: Laboratory studies demonstrated increased inflammatory markers, direct hyperbilirubinemia, acute kidney injury and positive serology for Leptospira. Nephrotic syndrome was excluded by 24-hours urine collection and pleural effusion was transudate. Echocardiogram demonstrated pulmonary hypertension without left heart disease, while pneumonitis and thromboembolic disease were excluded by computed tomography and ventilation-perfusion scan, respectively. Patient was treated with intravenous doxycycline for 10 days. At reassessment one week later, no oedemas were found, renal function and bilirubin levels were in normal range and echocardiogram revealed no pathologic parameters.

Conclusions: Among the known pulmonary manifestations of Leptospirosis, it is described for the first time in the literature reversible pulmonary hypertension as a complication of Leptospirosis, probably due to vasculitis in the context of the underlying infection.

Keywords: *leptospirosis, pulmonary hypertension, vasculitis*

[Abstract:1833]

A DISSEMINATED CASE OF A USUALLY LOCALISED INFECTION IN AN IMMUNOCOMPETENT PATIENT

Michail Chatzopoulos, Panagiota Micha, Andreas Droulias, Kleomenis Salapatas, Maria Koloutsou, Fotinie Ntziora, Elpida Mastrogianni

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Purpose: *Bartonella henselae* (BH) is the main cause of cat scratch disease (CSD), which typically presents as a self-limited localized suppurative lymphadenopathy in immunocompetent individuals. Systemic disease with life-threatening complications, such as angio proliferative lesions, glomerulonephritis, vasculitis, hemophagocytic syndrome, and neurological problems may be seen in immunocompromised hosts.

Methods: A 50-year-old immunocompetent woman presented with fever reaching 39.2°C and pain in the upper left hypochondriac region that began 24 hours before admission. About one month prior, she presented to the emergency department due to epitrochlear and axillary lymphadenopathy of the right arm following a cat scratch. The diagnosis of CSD had been made. She underwent a 5-day regimen of azithromycin, showing clinical improvement, but then relapsed.

Findings: On admission she underwent imaging, revealing hepatosplenomegaly, without any other findings. The diagnostic assessment included infectious, immune, and hematologic causes that could lead to fever and hepatosplenomegaly yet yield no positive results. Serology for BH was positive, whereas PCR was negative. Subsequently, the patient received intravenous treatment with azithromycin and rifampicin for five days, followed by oral doxycycline and rifampicin for an additional ten days. The fever and abdominal pain receded on the second day of treatment.

Conclusions: CSD is a typically localized infection in immunocompetent individuals. In rare cases, it can lead to disseminated disease. Diagnosis of CSD can be retained despite a negative PCR result if any two of the following criteria are present: positive serology, contact with cats preceding clinical presentation and elimination of any other cause of lymphadenopathy.

Keywords: *cat-scratch disease, lymphadenopathy, Bartonella henselae*

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[Abstract:1834]

CHARACTERIZATION OF PNEUMOCOCCAL DISEASES IN A NON-TERCIARY PORTUGUESE HOSPITAL

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Servico de Medicina Interna, Unidade Local de Saúde do Litoral Alentejano, Santiago do Cacém, Portugal

Summary: Pneumococcal diseases refer to symptomatic infections caused by *Streptococcus pneumoniae*. Invasive pneumococcal disease defines more severe infections with bacteria isolation in usually sterile body locations. Pneumococcal infections are known as a major cause of global morbimortality with the highest burden found in children and the elderly, being the leading cause of death by pneumonia worldwide. It is estimated that bacteraemia is found in 15-30% of pneumococcal pneumonia and that infection peaks in Winter.

Purpose: To characterize hospital admissions by pneumococcal disease in the last 7 years in a non-tertiary hospital.

Methods: Retrospective observational study with a sample size of 32 patients, between January 1st 2017 and November 1st 2023, with isolation of *Streptococcus pneumoniae*. Data were collected through online access to clinical processes and analysed with Microsoft Excel.

Findings: 65.6% were male, with a medium age of 70 years old (11 patients younger than 65 years old). The medium stay was 16.25 days. 43.75% were infected during winter with 61.9% having pneumonia. 33.33% had invasive pneumococcal disease (mostly bacteraemia). 12.5% died from the infection, all of the deaths related with concomitant superinfections with other isolated agents. In terms of treatment 45.2% of patients were treated initially with amoxicillin-clavulanate empirically, which was maintained after agent identification (only 2 of those patients had a superinfection).

Conclusions: Pneumococcal diseases are a public health problem, with elevated costs. The data found agree with literature descriptions with treatment aspects to improve.

Keywords: *pneumococcal, invasive, pneumococcus*

[Abstract:1866]

A RARE ETIOLOGY OF HEPATIC AND SPLENIC NODULES: BARTONELLOSIS

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Introduction: Bartonellosis is an infection that occurs following a cat scratch/bite, causing regional lymphadenopathy that typically resolves spontaneously. Here we present a Bartonellosis case presenting with axillary lymphadenopathy, hepatic and splenic nodules and elevated liver enzymes.

Case Presentation: A 49-year-old male patient was admitted to hospital after the detection of hepatic and splenic nodules and elevated liver enzymes. Two weeks prior, he had sought care at another facility due to fever and night sweats, where an abscess was discovered in his right axillary region and subsequently drained, with antibiotics prescribed. Lab: AST: 546. u/l, ALT: 709 u/l, GGT: 67 u/l, ALP: 104 u/l, t.bil: 0.49 mg/dl, d.bil: 0.22 mg/dl, INR:1.2, Hb: 15.6, Hct: 45.7, WBC: 6.09, PLT: 328000, abdominal US: 15x11 mm hypoechoic solid lesions in hepatic-right-lobe-anterior-segment, metastasis. Axillary US: Abscess: Necrotic lymph node. Torax CT: Areas of bronchiolitis. Abdomen CT: Multiple, hypovascular, nodular lesions in liver and spleen Abdomen MR-MRCP: Nodules in liver and spleen- metastasis, abscess PET: Right axillary pathologically increased FDG uptake, primarily suggestive of malignancy but could also be seen in granulomatous diseases. Hepatosplenic nodules could primarily be granulomatous, but also could be seen in lymphoproliferative diseases. Upper GIS endoscopy-colonoscopy, echocardiography, fundus examination were normal. Lab: ELISA, seruloplazmin, autoimmun-viral hepatitis/romatologic/tumor markers,indirect hemaglutination, brucella, syphilis tests were negative. Leishmania and bartonella tests were performed. Liver-left axillary lympnode biopsy: Granulomatous lympadenitis and resolving hepatitis with no pronounced granulomatosis-perinodular changes cannot be denied. *Bartonella henselae* IgG: (+)1/512. The patient disclosed a cat scratch incident two weeks before the onset of symptoms. Azithromycin treatment was initiated and the patient was discharged for follow-up with the gastroenterology department.

Conclusions: Bartonellosis, though rare, can be a causative factor for lymphadenopathy and hepatosplenic nodules. A thorough history, examination, and inquiry about cat contact are crucial for elucidating the aetiology.

Keywords: *Bartonella henselae, Bartonellosis, lympadenopathy, hepatosplenic nodules*

[Abstract:1871]

DENGUE FEVER PRESENTING AS ACUTE HEPATITIS: A CASE REPORT

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Background: Dengue is a viral disease transmitted by arthropod born viruses which causes a wide spectrum of clinical manifestations that ranges from a mild febrile illness to dengue shock syndrome and on certain patients it can evolve to an expanded dengue syndrome.

Case Presentation: A 23 year old man presented to the

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Emergency Department with 5 days of fever, headaches, nausea, vomiting and asthenia. Patient reports traveling to Thailand 2 weeks prior the beginning of symptoms. His presenting vital signs were stable and apart from multiple mosquito bites on lower limbs his physical examination was unremarkable. Full blood count revealed haemoglobin 15.8 g/dL, haematocrit 45.3% white blood cell 3.68 x10^9/L and platelet 72x10^9/L. His hepatic profile revealed an elevated transaminases AST 1073 UI/L, ALT 1119 UI/L, blood films for malarial parasites were negative. An initial diagnosis of acute hepatitis was made and was managed with intravenous fluids and antipyretic medication. Dengue serology was requested, and IgM was detected on day 5 of illness, leading to the final diagnosis of acute hepatitis secondary to Dengue infection.

Conclusions: Acute hepatitis due to dengue infection is considered an uncommon complication of dengue. In most cases, acute hepatitis secondary to dengue is self-limited with a minority risk of progressing to fulminant hepatic failure. Early diagnosis of dengue fever and institution of fluid management is essential to prevent morbidity and mortality.

Keywords: *dengue, hepatitis, transaminases*

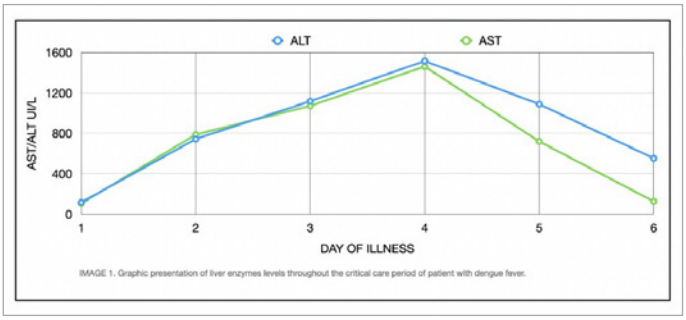

Figure 1. *Transaminase levels.*
Graphic presentation of liver enzymes levels throughout the critical care period of patient with dengue fever.

[Abstract:1881]

TUBERCULOUS SPONDYLITIS: EXPERIENCE IN A DEPARTMENT OF INTERNAL MEDICINE

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Background: *Tuberculous spondylitis* (TS) is a rare form of tuberculosis. The purpose of our study is to specify its epidemiological, clinical, biological and therapeutic peculiarities among Tunisian patients.

Case and Methods: A retrospective and descriptive analysis including patients with TS followed in a department of internal medicine. Diagnosis was retained in front of positive bacteriological/histopathological exams or the association of clinical, biological and radiologic arguments with therapeutic proof.

Results: Among ten patients with tuberculous spondylitis, 6 were women. The mean age at the time of diagnosis, was 50 years (13-90 years). The mean diagnosis delay was 8.33 months. Main initial symptoms were: back pain(n=8) and mobility limitation (n=6). Blood tests showed leucocytosis in all cases and elevated C-reactive protein levels in 6 cases. Tuberculin skin test was positive in 7 cases. Bacterial diagnosis was positive in one case. Granuloma with necrosis was noted in bone biopsy in 3 cases. The imaging examination showed signs of lytic destruction of vertebral body in all cases and multiple abscesses in 5 cases. TS was located in thoracic vertebra (n=5), lumbar vertebra (n=4) and cervical vertebra (n=1). Other locations were noted in 5 cases: lymphatic, meningeal, peritoneal, retropharyngeal and urogenital. All patients were treated with anti-tuberculosis quadritherapy with a mean duration of 14.93 months. One patient received corticosteroids for spine involvement. The outcome was favourable in all cases.

Conclusions: Tuberculosis always rages under an endemic mode in developing countries. The beginning is often insidious with a late diagnosis, therefore a delay in the therapeutic interference.

Keywords: *Tuberculous spondylitis, infectious diseases, internal medicine*

[Abstract:1911]

UNCOMMON RISK FACTOR IN ENTEROBACTERIAL MENINGITIS: A CASE REPORT

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Introduction: *Strongyloides stercoralis* poses a rare yet definitive risk for enterobacterial meningitis, particularly in immunocompromised individuals. This case underscores the importance of screening for strongyloidiasis in susceptible patients to prevent associated complications. This intestinal nematode is associated with disseminated bacterial infections, including pneumonia and meningitis, often caused by Gram-negative bacilli colonizing the digestive system.

Case Description: A 78-year-old woman, successfully treated for mantle cell lymphoma and currently on ibrutinib maintenance therapy, presented with subacute asthenic syndrome, vomiting, epigastric pain, and intermittent non-pathological diarrhoea. Neurological deterioration followed, with decreased consciousness, left hemiplegia, and right ocular deviation. Diagnostic workup revealed turbid cerebrospinal fluid with *E. coli* growth, along with positive PCR and ELISA results for

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Strongyloides stercoralis. The patient received empirical treatment with ceftriaxone, ampicillin, meropenem, and a 7-day course of ivermectin.

Discussion: Strongyloidiasis is an uncommon but definitive risk factor for enterobacterial meningitis, accounting for up to 7% of cases. The mechanism involves disruption of the gastrointestinal mucosa, facilitating the entry of intestinal flora into the bloodstream. Immunocompromised individuals, including those with hematologic neoplasms, transplants, or chronic steroid use, are prone to *Strongyloides stercoralis* dissemination. Increasing corticosteroid use has raised the incidence of hyperinfestation, with a mortality rate ranging from 15% to 87%. Clinical guidelines advocate systematic screening and treatment for at-risk immigrant patients.

In conclusion, it needs to be taken into account in susceptible individuals, not only in endemic tropical and subtropical regions but also in specific areas of Spain, such as the Mediterranean coast.

Keywords: *strongyloidiasis, Strongyloides stercoralis, meningitis, enterobacterial meningitis, immunocompromised*

[Abstract:1918]

DESCRIPTION OF THE CLINICAL CHARACTERISTICS OF INFECTIVE ENDOCARDITIS AND INTRACARDIAC DEVICE INFECTION IN A COUNTY HOSPITAL DURING THE PERIOD 2009-2022

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In this study we analysed the characteristics of hospitalized patients with a diagnosis of infective endocarditis and/or intracardiac device infection.

In the 2009-2022 period, 60 patients were admitted with a mean age of 66.5 years and a standard deviation of 15.98. Seventy-three percent were men. The most frequent site of acquisition was community, followed by nosocomial and nosohusial (78%, 12% and 10% respectively). A transthoracic echocardiogram was performed in all patients and a transesophageal echocardiogram (TEE) in 60% of cases for confirmation. The native valve was the most affected (78%), with the aortic valve being the most frequent (51%), followed by the mitral and tricuspid (38% and 11%, respectively). The prosthetic valve was affected in 22%. Pacemaker infection occurred in 2%. The most frequent etiological microorganism was *S. aureus* (30%). As complications, 8% developed persistent bacteraemia, 32% presented systemic embolization, the most frequent being splenic (32%). Thirty-eight percent of the patients were transferred by surgical criteria. Twenty percent of the patients were discharged during admission. At one year, 65% of the patients were still being followed up in our centre and 30% of these patients had an exitus, of which 50% were related to endocarditis.

Statistical analysis did not detect significant changes in terms of age, comorbidities, causative microorganism and mortality, and a multivariate analysis did not identify factors related to mortality.

As conclusions, we observed a relatively high number of indications for surgery, as well as a high percentage of patients who died during admission and during subsequent follow-up.

Keywords: *endocarditis, microorganism, cardiac surgery*

[Abstract:1920]

SEVERE ICTERIC HEMORRHAGIC LEPTOSPIROSIS: A CHALLENGING CLINICAL ENCOUNTER

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Introduction: Leptospirosis is a zoonotic disease with a wide spectrum of clinical manifestations. Severe icteric haemorrhagic leptospirosis is an uncommon yet potentially life-threatening form, characterized by jaundice, bleeding tendencies and multi-organ involvement. This abstract aims to illuminate the challenges in diagnosing and managing a case of severe icteric haemorrhagic leptospirosis.

Case Description: This concerns a 37-year-old patient who, following a trip to Thailand involving aquatic activities, presented with a challenging clinical profile featuring arthralgia, fever, and hematemesis. Initial assessments revealed anuric renal failure, severe thrombocytopenia (30,000 platelets) and a total bilirubin level of 7, necessitating ICU admission for renal replacement therapy. Gastroscopy unveiled bleeding astral and duodenal ulcers. Subsequently, the patient developed profound respiratory distress with radiographic evidence of alveolar haemorrhage, prompting the initiation of corticosteroid therapy. Considering the travel history, empirical treatment encompassed doxycycline alongside meropenem and daptomycin. Leptospira serology confirmed IgM positivity, while other microbiological tests yielded negative results.

Discussion: This case underscores the clinical challenge and the pivotal role of suspecting leptospirosis in patients presenting with a compatible clinical picture (jaundice, liver disorders, thrombocytopenia and haemorrhagic manifestations), particularly from endemic regions. Recognizing these signs promptly and initiating empirical treatment can significantly impact the patient's prognosis. Furthermore, in the context of icteric-haemorrhagic leptospirosis, close monitoring for potential complications, such as alveolar haemorrhage, is crucial.

This case highlights the urgency of greater awareness in

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diagnosing severe leptospirosis, contributing valuable insights to the understanding and management of this challenging infectious disease.

Keywords: *leptospirosis, thrombocytopenia, liver failure, haemorrhagic fever*

[Abstract:1921]

SEVERE MALARIA WITH PULMONARY AFFECTION DUE TO *PLASMODIUM VIVAX*: A CASE REPORT

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Introduction: Malaria is a parasitic disease caused by the protozoan Plasmodium, transmitted through the bite of a female mosquito of the genus Anopheles. Although *Plasmodium falciparum* remains the main species causing severe malaria, an increasing number of cases are reported by *Plasmodium vivax*, a species whose latent forms can reactivate months to years after exposure. Due to globalization, malaria continues to be the most significant imported tropical disease in Europe.

Case Presentation: A 46-year-old woman natural from India, in Portugal for 6 months, with a history of hypertension and hypothyroidism, was admitted to the Emergency Department with dizziness, asthenia, and fatigue for three days. On examination she was febrile and hypoxemic. Analytically she had severe anaemia (haemoglobin 4.1 g/L) and thrombocytopenia (120,000). Chest tomography revealed extensive areas of ground-glass opacification. Admitted to the intensive care unit requiring high flow oxygen therapy. During extensive study, it was isolated Plasmodium vivax with a parasitaemia of 50% and a density of 8645 parasites/µL. Due to the unavailability of artesunate, treatment was initiated with artemether+lumefantrine and doxycycline. Progressive improvement was observed with the possibility of oxygen weaning. On the third day of treatment, parasitaemia was negative and she was transferred to the ward, awaiting glucose-6-phosphate determination for latent hypnozoite eradication therapy.

Conclusions: Plasmodium vivax can reactivate months to years after exposure, necessitating a high level of suspicion for diagnosis. Malaria remains a serious global public health problem and this diagnosis should always be considered in the presence of epidemiological exposure.

Keywords: *severe malaria, Plasmodium vivax, intensive care*

[Abstract:1940]

A CASE-REPORT OF *KLEBSIELLA PNEUMONIAE* SEPSIS WITH MULTIORGAN EMBOLIZATION

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A 60-year-old male with type 2 diabetes and right hip prosthesis went to the emergency room due to fever, lumbago, and lower limbs pain with three-day-evolution, presenting hemodynamic instability and pain mobilizing right lower limb.

Blood gas analysis revealed: pH 7.38, pCO_2 34 mmHg, pO_2 74 mmHg, HCO_3- 23.1 mmol/L, lactate 1.1 mmol/L and laboratory **Findings:** platelets 14,000/µL, reactive C protein 33 mg/dL, procalcitonin 29 ng/mL, blood glucose 476 mg/dL with ketonemia 3.8 mmol/L; pathological urine sediment and pelvis computed tomography (CT) non-suggestive of infection. Urosepsis and decompensated diabetes were assumed, blood and urine cultures harvested, and insulin and empiric amoxicillin/clavulanate started. Subsequently, patient presented an erratic consciousness, justifying a brain magnetic resonance imaging (MRI) showing foci with bilateral atrial hypersignal, reflecting infectious exudate. Several lumbar puncture attempts unsuccessful.

Due to persistent fever, new onset of paraparesis and distal hypoesthesia of lower limbs and inflammatory markers' elevation, spinal and thoracoabdominopelvic CT were performed showing L4-L5 spondylodiscitis with voluminous abscess of the right psoas muscle (PM) and intracanal infectious extension plus hepatic, splenic and pulmonary infectious foci. Echocardiogram revealed aortic vegetation suspicion.

Switch to ceftriaxone was made, regarding better bone and meningeal penetration and *K. pneumoniae* isolation with susceptibility to it, amoxicillin/clavulanate, cefotaxime and gentamicin.

Patient underwent L4-L5 laminectomy with negative biopsy culture. Lumbar spine MRI showed improved intracanal permeability, yet increased PM abscess, which required surgical drainage, with negative culture.

This case highlights the infections' complexity, which may embolize to several organs, being revealed in unusual symptoms, requiring a multidisciplinary approach, to achieve adequate treatment and better outcome.

Keywords: *sepsis, Klebsiella pneumoniae, embolus, psoas muscle abscess*

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[Abstract:1953]

PAROTID AND LUNG NODULES IN HUMAN IMMUNODEFICIENCY VIRUS SUBTYPE 1 INFECTION

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A 40-year-old woman originally from Guinea went to the Emergency Room with a one year and half clinical history of colicky abdominal pain, and weight loss. A right parotid nodule with one week of evolution. No previous fever, nocturnal sweats, or flu-like symptoms were mentioned. No previously known unsafe sexual behaviour. Physical exam showed a painful abdomen in the lower quadrants, and a cystic lesion in the right parotid but with no adenopathies palpable. Blood work revealed human immunodeficiency virus (HIV) subtype 1 positive serology, CD4 lymphocyte count 79 cell/µl and sterile blood culture. The Thorax, Abdomen and Pelvic Computed Tomography evidenced multiple disseminated nodules in both lungs and ascitic fluid in the lower abdomen. Ascitic fluid showed low glucose (2 mg/dL) and high adenosine deaminase (70 IU/L). However, Mycobacterium culture and acid-fast stain were negative. Bronchoscopy and bronchoalveolar lavage were normal. Face and Neck ultrasound showed enlarged parotids with countless millimetric nodules and multiple necrotising cervical adenopathies. Hence, the diagnosis was disseminated mycobacteriosis in acquired immunodeficiency syndrome (AIDS). Thus, it was anti-tuberculosis (TB) and antiretroviral drugs were started. HIV infection is a prevalent disease in Africa affecting 1.5% of the total population, where subtype 1 is the most prevalent. One of the defining diseases of AIDS includes disseminated TB or other mycobacterium disease in CD4 cell count below 100 µL. Moreover, this case had clinical resemblance of diffuse infiltrative lymphocytosis syndrome (DILS) having parotid and lung nodules, also associated in AIDS.

Keywords: *HIV infection, DILS, disseminated mycobacterial infection*

[Abstract:1963]

MULTISYSTEMIC EMBOLIZATION AS FIRST MANIFESTATION OF INFECTIVE ENDOCARDITIS

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A 63-year-old man with a history of mitral valve (MV) prolapse was admitted to the hospital for three days of evolution of behavioural changes. He was apyretic, hemodynamically stable, with no focal deficits on neurological examination. Laboratory tests revealed slight anaemia and thrombocytopenia, leukocytosis with neutrophilia, and C-reactive-protein 149 mg/L. Brain-computed tomography (CT) revealed a left parietal infarction [Fig 1] and thoracic-abdominopelvic-CT showed bilateral areas of infarction of the kidneys. Lumbar puncture demonstrated 40% glucose consumption and pleocytosis- 55% polymorphonuclear cells. Empiric antibiotic therapy for meningitis was started. Because of findings of multiple ischemic lesions, an echocardiogram was performed and showed a 13x5 mm vegetation of the MV [Fig 2]; therefore, infective endocarditis (IE) was diagnosed. *Streptococcus anginosus* was isolated in blood cultures. The patient evolved with ophthalmic symptoms and it was documented multiple ocular embolic lesions [Fig 3], that progressed to endogenous endophthalmitis (EE) under intravitreal injections and systemic antibiotic therapy. Due to the severity of the case with active multisystemic embolization, the patient was transferred to the hospital of reference, where he underwent valve replacement surgery.

IE is a severe disease that remains a diagnostic and treatment challenge nowadays. A high index of suspicion and low threshold for investigation are essential to the prompt institution of antibiotic therapy. Extracardiac manifestations, generally due to emboli, mustn't be forgotten and may be the first manifestation of the disease. EE is a rare ocular manifestation, associated with high mortality rates and poor visual prognosis. Early surgery is a mainstay in cases of high risk of embolization.

Keywords: *endocarditis, endophthalmitis, Streptococcus anginosus, embolization*

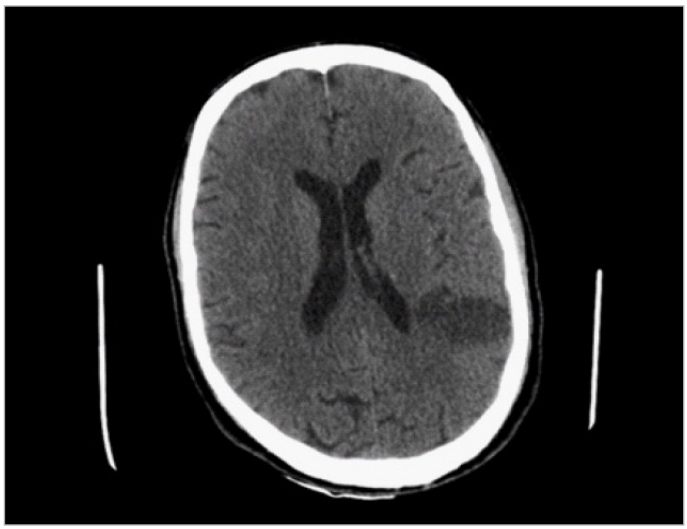

Figure 1. *Left parietal cortico-subcortical infarction sequelae in brain computed tomography at admission.*

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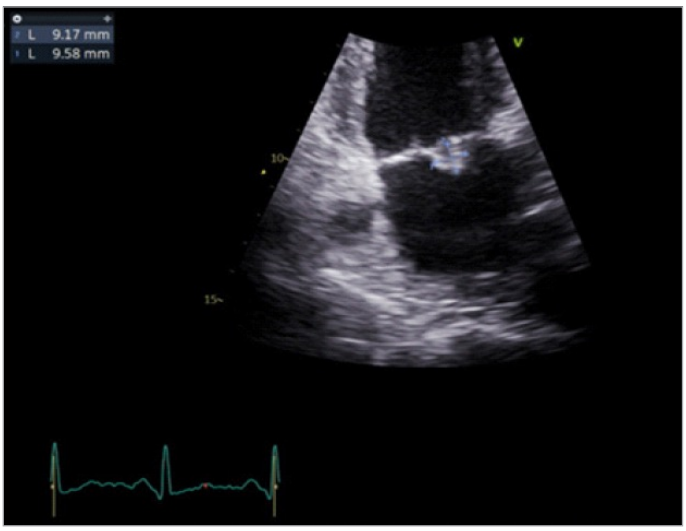

Figure 2. Transthoracic echocardiogram with a 13x5 mm vegetation on the mitral valve with friable appearance.

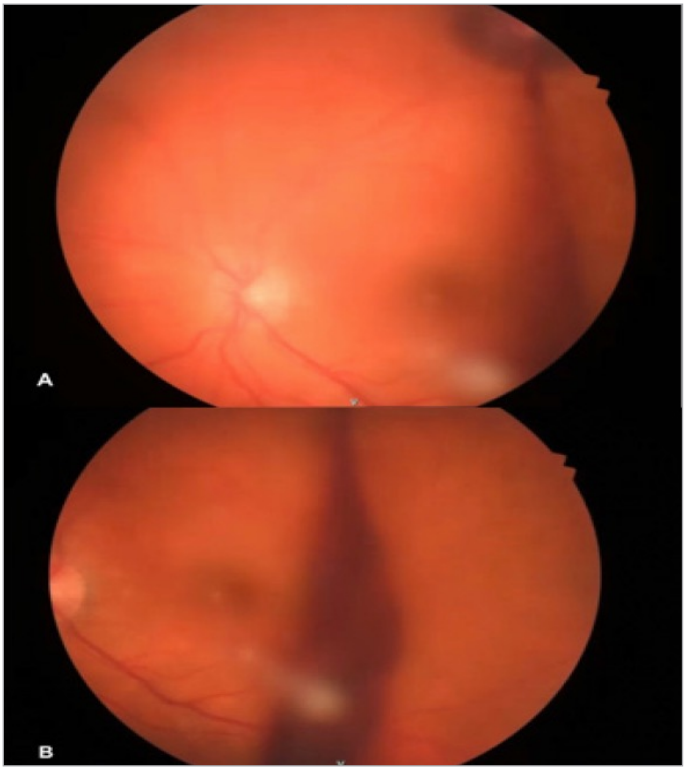

Figure 3. Colour Fundus Photography (CFP) of the left eye. There is evidence of vitreous haemorrhage, originating from a round, white-centred subretinal haemorrhage visible along the course of the superior temporal retinal artery.

[Abstract:1981]

CHARACTERISTICS OF HOSPITALIZATIONS IN PATIENTS WITH HUMAN IMMUNODEFICIENCY VIRUS (HIV) BETWEEN 2018-2023 IN A TERTIARY HOSPITAL. A DESCRIPTIVE STUDY

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Objectives: To analyse the characteristics of admissions in a population living with HIV. HIV infection is a disease that has become chronic thanks to the effectiveness and potency of antiretroviral therapies. The aging of people who are well controlled immunovirologically implies new health problems and new comorbidities that require attention from different medical specialties.

Materials and Methods: Retrospective observational-descriptive study. Hospitalizations between January 1, 2018 and January 31, 2023 with an HIV diagnosis were included. Inconclusive HIV laboratory tests were excluded, as well as contact and exposure studies to HIV.

Results: 784 hospitalizations were collected, the mean age was 50 years, the mean stay was 12 days and 65.8% were men. Regarding the main diagnosis that led to admission, 314 were for an infectious disease and 72 for cardiovascular disease. The most common primary diagnosis was HIV disease itself (107), followed by antineoplastic chemotherapy (19), COVID-19 (17), influenza (13), pneumonia (10), childbirth (10), and myocardial infarction without ST elevation (NSTEMI) (9) (Table 1). Patients were hospitalized in 25 different units (Table 2), the most frequent were Infectious Diseases (214) and Internal Medicine (121), followed by General Surgery (66), Hematology (44) and Cardiology (41). Mortality during admission was 5.1%.

Conclusions: The wide distribution of hospitalizations in 25 different units stands out, which include specialists from various areas. As well as the increasing trend of cardiovascular disease in these patients, being responsible for more than 9% of hospitalizations, Cardiology is the fifth unit that most frequently cares for these admissions and NSTEMI is the seventh cause of admission of HIV patients in this studio.

Keywords: *human immunodeficiency virus, infectious disease, cardiovascular disease*

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Main diagnoses	Frequency	Percent
Human immunodeficiency virus [HIV] disease	107	13.6
Contact for antineoplastic chemotherapy	19	2.4
COVID-19	17	2.2
Flu	13	1.7
Pneumonia, unspecified microorganism	10	1.3
Human immunodeficiency virus [HIV] disease complicating childbirth	10	1.3
Acute non-ST elevation myocardial infarction (NSTEMI)	9	1.1
Anogenital (venereal) warts	9	1.1
Centrilobular emphysema	8	1.0
Chronic obstructive pulmonary disease with exacerbation (acute)	7	0.9
Acute pyelonephritis	7	0.9
Liver cell carcinoma	6	0.8
Malignant neoplasm of the frontal lobe	6	0.8
Enteropathy-type T-cell lymphoma (intestinal)	6	0.8
Carcinoma in situ of anus and anal canal	6	0.8
Atherosclerotic heart disease of native coronary artery with unstable angina pectoris	6	0.8
Pneumonia due to *Streptococcus pneumoniae*	5	0.6
Chronic obstructive pulmonary disease with acute lower respiratory tract infection	5	0.6

Table 1. *Frequency distribution of the 20 most frequent main diagnoses in the recruited hospitalizations.*

Different units	Frequency	Percent
Infectious diseases	214	27.3
Internal Medicine	121	15.4
General Surgery	66	8.4
Haematology	44	5.6
Cardiology	41	5.2
Digestive System	41	5.2
Obstetrics	36	4.6
Traumatology	34	4.3
Urology	27	3.4
Gynaecology	21	2.7
Vascular Surgery	18	2.3
Pulmonology	17	2.2
Medical Oncology	16	2.0
Neurosurgery	16	2.0
Intensive Care Unit	15	1.9
Neurology	13	1.7
Psychiatry	11	1.4
Otorhinolaryngology	10	1.3
Radiodiagnosis	6	0.8
Endocrinology	5	0.6
Nephrology	4	0.5
Ophthalmology	3	0.4
Rheumatology	2	0.3
Paediatrics	2	0.3
Thoracic Surgery	1	0.1

Table 2. *Frequency distribution of the different units where hospitalizations occurred.*

[Abstract:1985]

INVASIVE PULMONARY ASPERGILLOSIS IN AN IMMUNOCOMPROMISED PATIENT

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A 46-year-old woman diagnosed with metastatic renal carcinoma is undergoing treatment with cabozantinib. She presents with persistent fever, dry cough, and myalgias. Upon examination, hypotension, tachycardia, and tachypnea are noted.

Blood tests reveal creatinine levels of 1.32 mg/dL, glomerular filtration rate of 48 ml/min, C-reactive protein of 391 mg/l, and procalcitonin of 1.21 ng/mL. Antigenuria for Legionella and pneumococcus is detected in urine, while blood cultures and polymerase chain reaction (RT-PCR) for respiratory viruses are negative. Chest X-ray shows an infiltrate in the right upper lobe (RUL) (Figure 1).

She is admitted with a diagnosis of community-acquired pneumonia in an immunocompromised patient.

Empirical antibiotic therapy with meropenem is initiated. Due to clinical worsening, a positive RT-PCR for Cytomegalovirus in blood and a chest CT with a cavitated lesion in RUL are observed (Figure 2 and 3).

Bronchoalveolar lavage is positive for galactomannan and BD-glucan, suggesting pulmonary aspergillosis. RT-PCR for *Mycobacterium tuberculosis* and cultures are negative, while Interferon Gamma Release Assay (IGRA) is positive, indicating latent tuberculosis. Cytomegalovirus copies of 7000 are observed, initiating treatment with ganciclovir, followed by sequencing to valganciclovir plus voriconazole.

She is discharged with voriconazole for three months and valganciclovir for three weeks. A follow-up chest CT shows resolution of the lesion (Figure 4).

Invasive pulmonary aspergillosis is common in individuals with neoplasms, with a higher risk of viral superinfections. Diagnosis is based on a probability scale considering host, clinical, radiological, and microbiological criteria.

In this case, cellular immunosuppression, radiological findings, and microbiological criteria confirm the diagnosis of probable invasive bronchopulmonary aspergillosis.

Keywords: *invasive pulmonary aspergillosis, immunosuppression, galactomannan*

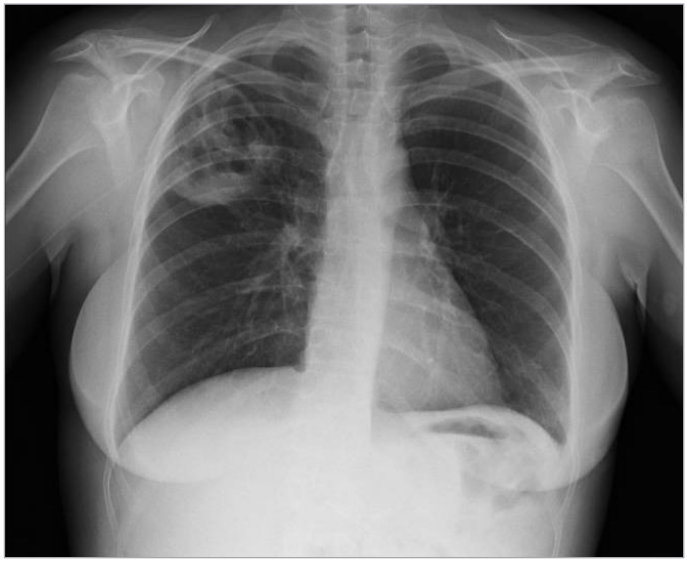

Figure 1. *Chest X-ray shows an infiltrate in the right upper lobe (RUL)*

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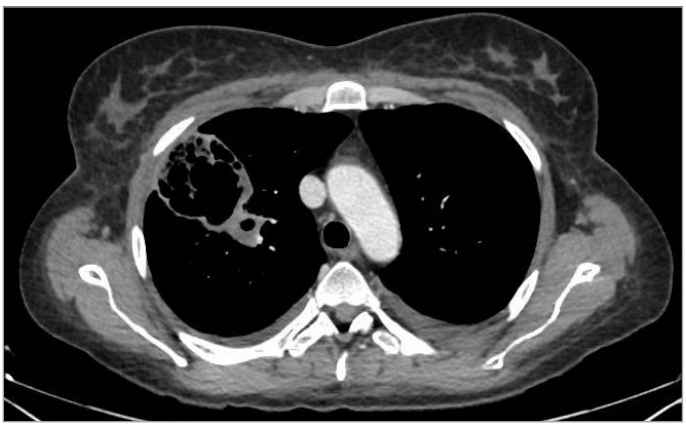

Figure 2. Chest CT with a cavitated lesion in RUL are observed.

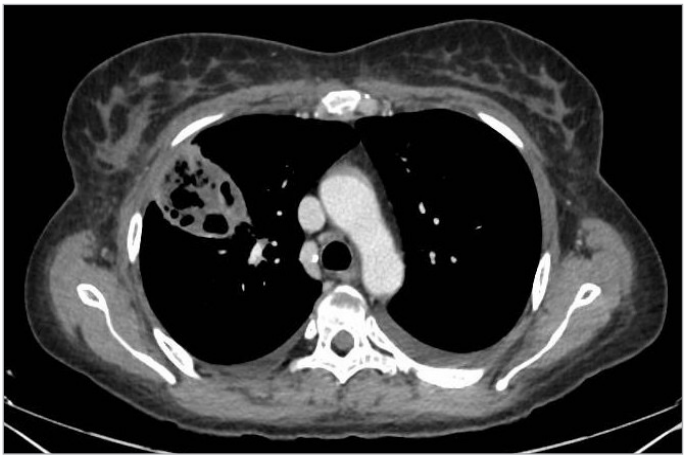

Figure 3. Chest CT with a cavitated lesion in RUL are observed.

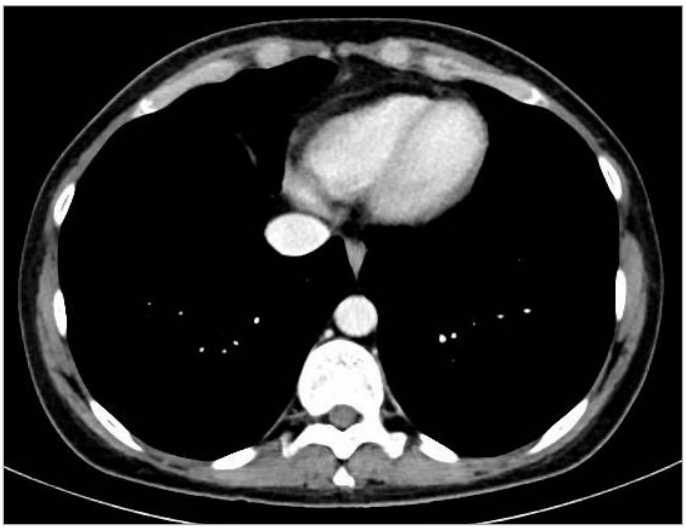

Figure 4. Chest CT shows resolution of the lesion.

[Abstract:1990]

LEADLESS PACEMAKER INFECTION RISK IN PATIENTS WITH CARDIAC IMPLANTABLE ELECTRONIC DEVICE INFECTIONS: A CASE SERIES AND LITERATURE REVIEW

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Objectives: Leadless pacemakers (LP) have been proposed as a reimplantation strategy in pacing-dependent patients undergoing cardiac implantable electronic device (CIED) extraction for infection. Data regarding the safety of these procedure and the risk of LP infection following this strategy are sparse. We analyse the risk of LP infection when this device is implanted before transvenous lead extraction.

Methods: This is a single-centre retrospective study, including patients who underwent LP implantation between 2017 and 2022. Patients were divided in two groups according to whether LP was implanted following CIED extraction for infection (Group 1) or other indications (Group 2). The primary aim was to describe the risk of LP infection.

Results: We included in this study 49 patients with a median age of 81 [20-94] years, mostly males (36, 73%). The main indication for LP placement was atrial fibrillation with slow ventricular response (24 pts, 49%). In Group 1 patients, 17 cases (85%) showed systemic CIED infections, and 11 (55%) had positive lead cultures. Most Group 1 cases (n=14, 70%) underwent one stage LP implantation and CIED extraction. Mortality rate during follow-up was 20% (9 patients). Patients were followed up for a median of 927 [41-1925] days and no cases of definite or suspected LP infection were identified.

Conclusions: Risk of LP infection is extremely low also when these devices are implanted during active CIED infection. LP appear a potential option for reimplantation in this setting and should be considered in pacing-dependent patients at high risk of CIED infection recurrence.

Keywords: *leadless pacemaker, cardiac implantable electronic device infection, infection risk*

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[Abstract:1995]

THE POTENTIAL ROLE OF NEUTROPHIL-TO-LYMPHOCYTE RATIO AS A BIOMARKER IN PATIENTS WITH INFECTIVE ENDOCARDITIS

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Objectives: Prognosis in patients with Infective Endocarditis (IE) relies upon several factors and is still difficult to predict. The Neutrophil-to-Lymphocyte Ratio (NLR) has showed to be a promising biomarker in patients with sepsis/septic shock. We analyse the role of NLR in predicting prognosis in patients with IE.

Methods: This is a single-centre retrospective study, including patients with definite IE (according to ESC criteria) collected between 2015 and 2023. The NLR has been analysed both as categorical (using the median value as a cut-off) and numerical variable. The study primary endpoint was in-hospital mortality.

Results: We included 261 patients with a median age of 65 [55-73] years, mostly males (174, 66.7%). The most common IE site was aortic valve (95, 36.4%). The median NLR was 7.1 [4.2-12]. Patients who died during hospitalization had a significantly higher NLR compared to survivors (11.5 [5.6-21] vs 6.7 [4.1-10.9]; p = 0.001). At multivariate analysis the NLR was independently related to in-hospital outcome (OR 1.067 [IC 95% = 1.008 – 1.129]; p = 0.026). The NLR showed a significant correlation with C-reactive protein (Rho coefficient 0.433; p < 0.001). Using a cut-off of 6.8, the NLR showed a sensitivity of 72% and a specificity of 51% in predicting in hospital mortality (AUC: 0.671; p < 0.001).

Conclusions: A higher NLR appears to be statically related with a worse in-hospital outcome in patients with IE. Its use should be considered in this clinical setting and included in the work-up of patients with infective endocarditis.

Keywords: *infective endocarditis, neutrophil-to-lymphocyte ratio, prognosis*

[Abstract:2024]

DECIPHERING THE PUZZLE: INFLUENZA-ASSOCIATED MYOCARDITIS EVOLVING INTO SEVERE DILATED CARDIOMYOPATHY IN A YOUNG ADULT

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Introduction: Viruses play a pivotal role in myocarditis and dilated cardiomyopathy. Timely diagnosis is paramount, given the varied clinical presentation. This review emphasizes the need for heightened suspicion to tailor therapeutic interventions effectively in influenza-induced severe cardiac complications.

Case Description: A 37-year-old male, with a history of smoking and sporadic use of methamphetamine, presented with dyspnoea for three weeks and increasing oedema in the lower extremities after a febrile episode and arthralgia. He was admitted directly to the Intensive Care Unit for cardiogenic shock and secondary multiple organ failure requiring extracorporeal membrane oxygenation (ECMO) and renal replacement therapy. The diagnostic process revealed the presence of influenza A virus, implicating it as the primary cause of myocarditis progressing to severe dilated cardiomyopathy with global left ventricular dysfunction. Therapeutic interventions, including antiviral therapy with oseltamivir and supportive care, were employed to address the complex clinical scenario.

Discussion: This case highlights the potential of influenza virus to induce myocarditis, leading to a rare yet severe complication of dilated cardiomyopathy in a relatively young individual with additional cardiovascular risk factors (smoking and sporadic methamphetamine use). The timely identification of influenza as the culprit pathogen allowed for targeted therapeutic interventions, highlighting the importance of considering viral aetiologies in cases of acute myocarditis, especially when accompanied by shock and multiorgan failure. The report contributes to the understanding of the diverse manifestations of influenza-related cardiac complications and emphasizes the need for a comprehensive approach in managing such critically ill patients.

Keywords: *myocarditis, influenza, dilated cardiomyopathy*

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[Abstract:2035]

THE ROLE OF PANCREATIC STONE PROTEIN IN TRIAGING CASES OF INTRA-ABDOMINAL INFECTION: THE EXAMPLE OF TWO CASES

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Background: Pancreatic stone protein (PSP) is mainly secreted by pancreatic cells, but also increases in response to systematic stress as an acute phase protein. Life-threatening infections that may need intensive care, including surgical source control or antibiotic treatment escalation, must be distinguished immediately.

Objectives: To present two cases, part of a wider study designed to assess the prognostic accuracy of PSP in predicting intra-abdominal infection complications.

Case Presentation: Patient 1: A previously healthy 18-year-old female was admitted to our hospital complaining of diarrhea and mild abdominal pain. The patient presented with fever up to 40oC. Physical examination revealed no pathological findings. The ultrasound (US) showed mild caecal wall thickening and lower abdominal fluid collection. The patient was treated as gastroenteritis. PSP was measured upon admission and was found 360 ng/dl while CRP was 6.12 mg/dL. Considering the extremely high PSP level, a repetitive US was performed after three days that was diagnostic for appendicitis. She underwent surgery and recovered rapidly.

Patient 2: Concurrently, another 18-year-old female admitted to our hospital presenting with the exact same symptoms. She was non-febrile and physical examination revealed no pathological findings. US and abdomen CT showed lymphadenopathy. PSP measurement upon admission was 36 ng/ml while CRP was 0.12 mg/dL. Patient was diagnosed and treated as gastroenteritis and 4 days after admission was discharged.

Conclusions: PSP can predict unfavourable outcomes, including antibiotic treatment escalation and surgery requirement among patients with intra-abdominal infections. Moreover, its sharp increase after infection onset, particularly sepsis, classifies it as a point-of-care biomarker.

Keywords: PSP, intra-abdominal infection, sepsis, prediction medicine, biomarkers

[Abstract:2044]

RHOMBENCEPHALITIS BY *LISTERIA MONOCYTOGENES*

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A 78-year-old woman, with no significant medical history, was admitted because of fever (38.5°C) and chills. During examination, she was conscious and oriented, with increased respiratory rate at rest with a baseline oxygen saturation of 96%. No pathological signs on cardio-pulmonary auscultation. Laboratory findings indicated leukocytosis with neutrophilia, a C-reactive protein level of 495mg/dl, and a procalcitonin level of 15 ng/ml. Additionally, there was an acute deterioration in renal function parameters, including a creatinine level of 4.25mg/dl, elevated urea, and secondary metabolic acidosis. Hematological and urine cultures were obtained, and urgent chest X-ray and abdominal ultrasound were inconclusive. A thoracoabdominal and head computed tomography (CT) scan had no findings.

The patient's clinical condition rapidly deteriorated, with alternating cycles of drowsiness and agitation, right hemihypesthesia, and paralysis of the right seventh cranial nerve. Lumbar puncture showed cerebrospinal fluid (CSF) with significant pleocytosis (1294 leukocytes), hypoglycorrhachia, and elevated protein levels. No pathogens were identified in Gram staining, India ink, or molecular detection techniques.

Antibiotic therapy with cefotaxime, vancomycin, and ampicillin was initiated, but the patient's mental status continued to decline. To rule out central complications, a second lumbar puncture demonstrated improved inflammatory parameters. A cranial magnetic resonance imaging (MRI) revealed encephalitis of the brainstem, particularly at the pontine level. *Listeria monocytogenes* was isolated in CSF cultures. The patient was treated with ampicillin and gentamicin initially, followed by ampicillin alone, leading to complete clinical remission after a 6-week course.

Keywords: Listeria, rhombencephalitis, ataxia

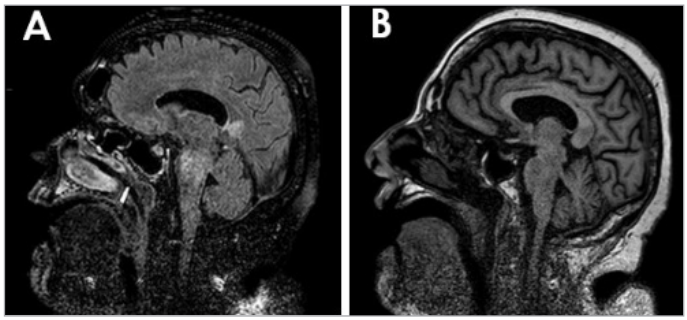

Figure 1. *Coronal sections of cranial MRI revealing a diffuse alteration in signal intensity of the brainstem and splenium of the corpus callosum, appearing hyperintense in FLAIR sequence (A) and slightly hypointense in T1 without contrast (B).*

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[Abstract:2047]

BATTLING THE UNSEEN INTRUDER - A TALE OF ENDOCARDITIS AND SPONDYLODISCITIS CAUSED BY *STREPTOCOCCUS GORDONII*

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The convergence of endocarditis and spondylodiscitis poses a challenge, demanding clinical acumen and a multidisciplinary approach. The *Streptococcus gordonii* are usually present in the oral cavity, upper airways, gastrointestinal tract, and female genitalia. It rarely causes invasive infections including endocarditis. This case elucidates the diagnostic and therapeutic considerations of endocarditis and spondylodiscitis caused by this uncommon pathogen.

A 77-year-old man, ex-smoker, osteopenia and ethanol habits went to Emergency Department, due to back pain, prostration and disorientation, associated with food refusal. Neurological examination revealed disorientation in space and time, with no ability to name, repeat or retain information. Cranial computed tomography angiography was performed without any changes. Analytically, hyponatremia of 127 mmol and C-reactive protein 6.57 pg/mL were highlighted. A lumbosacral Magnetic Resonance Imaging revealed perivertebral abscess, spondylodiscitis as well as the coexistence of a left psoas abscess. Blood cultures were taken with a positive result to *Streptoccocus gordonii* and transesophageal echocardiogram was performed with an image suggestive of aortic valve endocarditis.

He underwent valve prosthesis implantation through cardiothoracic surgery and during postoperative had a tamponade requiring surgical drainage with improvement. Due to spondylodiscitis he completed 12 weeks of benzylpenicillin with resolution.

This narrative serves as a beacon, guiding clinicians through the intricacies of managing a rare and challenging clinical scenario. Within diagnosing *S. gordonii* endocarditis, spondylodiskitis should probably be looked for in patients suffering from back pain as duration of antibiotic treatment to achieve complete cure may be considerably longer than in the absence of spinal infection.

Keywords: *Streptococcus gordonii, endocarditis, spondylodiscitis*

[Abstract:2076]

SERIOUS COMPLICATIONS OF *HERPES ZOSTER* IN THE ELDERLY PATIENT

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Herpes zoster (HZ) arises from reactivation of the varicella-zoster virus (VZV), which remains latent in the central nervous system (in the ganglia of dorsal and cranial roots) following primary infection. It is characterized by a vesicular rash with distribution along a dermatome. Its incidence increases with age and is associated with the loss of cellular immunity.

The authors describe a case of periorbital cellulitis resulting from superinfected oculo-cutaneous HZ and meningoencephalitis due to VZV. A 70-year-old Caucasian male with a medical history of cerebrovascular disease, dementia syndrome, and chronic alcoholism was admitted to the Emergency Department with 24 hours of prostration and anorexia, accompanied by erythema, oedema, and vesicular lesions in the left periorbital region. On examination, he was hemodynamically stable, febrile, prostrate (Glasgow Coma Scale 11), with vesicular lesions in different stages of healing scattered along dermatomes V1 and V2 on the left.

The cranial CT scan revealed thickening of the soft tissues of the face and periorbital region on the left, likely of inflammatory nature. A lumbar puncture was performed, confirming viral meningitis with the isolation of VZV PCR. Additional studies showed positive VZV IgG serology and negative IgM. He received treatment with acyclovir and vancomycin, resulting in analytical and clinical improvement. Upon discharge, he presented dysphagia for liquids and initiated a physiatric plan.

This case illustrates a severe complication of VZV reactivation, emphasizing the importance of early lumbar puncture. Early diagnosis of inherent severe complications and prompt treatment are essential for reducing morbidity and mortality.

Keywords: *Herpes zoster, varicella-zoster virus, periorbital cellulitis, meningoencephalitis*

[Abstract:2089]

PERSISTENT LOW-GRADE VIREMIA IN PEOPLE LIVING WITH HIV: A LITERATURE REVIEW

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This literature review aims to address low-grade viremia in HIV patients, examining its prevalence, risk factors, clinical and virological consequences, and management recommendations. A thorough search was conducted on PubMed, and national and international clinical guidelines were consulted, prioritizing studies from the last 10 years, when more effective antiretroviral treatments became widespread.

The results reveal the lack of a universal definition of low-grade viremia, with variable prevalence, higher in less developed countries. It is speculated that persistent viremia may result from viable HIV virus production in viral sanctuaries with limited drug penetration. Associated factors include treatment adherence failures, resistance mutations, pharmacological interactions, high viral load at treatment initiation, and male gender.

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The risk of virological failure appears to increase with viremia levels starting from 200 copies/mL, with associated severe consequences. However, there is controversy regarding treatment change, generally recommended for viral loads exceeding 200 copies/mL.

Regarding transmission risk, studies like PARTNER indicate no risk if the viral load is below 200 copies/mL. The conclusion emphasizes the need for a unified definition of low-grade viremia, highlights prevention strategies such as using effective antiretroviral therapies, underscores the importance of treatment adherence, and advocates for close patient monitoring to optimize management, especially in those with viral loads above 200 copies/mL and resistance mutations.

Keywords: *HIV, low-grade viraemia, review*

[Abstract:2103]

POTT'S DISEASE: A JOURNEY THROUGH DIAGNOSIS AND TREATMENT - A CASE REPORT

Gabriela Carvalho Monnerat Magalhães, Giovana Carvalho Monnerat Magalhães, Júlia Moniz Ganem, Thaíssa Santos Monteiro, Bruna Carnevale, Larissa Da Motta Fernandes, Lorena Arros Miranda, Maria Clara Pinheiro Rubio Carrasco, Cheyenne Ferreira Pereira Cartolano, Fabio Akio Nishijuka

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Case Description: 30-year-old man with Marfan Syndrome, resident of Rio de Janeiro, underwent atrioseptoplasty at the age of 3yo. He presented with chronic mechanical low back pain associated with weight loss, hyporexia, tachycardia, paraplegia and a visible protuberance on the back. Additional tests revealed anaemia with elevated inflammatory parameters, in addition to Magnetic Resonance Imaging (MRI) of lumbar spine with spondylodiscitis at L2-L4, associated with a 5mm laminar collection, but no compressive myelopathy. Patient revealed proximity to a tuberculous family member.

Clinical Hypothesis: Spondylodiscitis due to *Mycobacterium tuberculosis* (BK).

Diagnostic Pathways: Due to the logistical impossibility of performing a biopsy, empirical therapy with rifampicin, isoniazid, pyrazinemide and ethambutol was started. After 15 days, he exhibited clinical and laboratory improvement (Figure 1) and remained asymptomatic post 12-month treatment.

Discussion and Learning Points: Skeletal tuberculosis, also known as Pott's disease (PD), may occur in 10 to 35% of all types of BK. It was described in the 18th century by Percival Pott, but archaeological studies had already described such injuries in Egyptian mummies dating back to 9000 BC. It may originate from blood dissemination from the primary focus. Gold standard for diagnosis is CT-guided biopsy, but MTI provides images suggestive of PD. Due to challenges in accessing a public orthopaedist, we chose empirical treatment. Early detection plays a crucial role in preventing complications such as kyphosis, spinal canal stenosis and permanent neurological damage. Surgical intervention may be necessary, and the response to treatment is usually gradual.

Keywords: *spondylodiscitis, Pott's disease, tuberculosis*

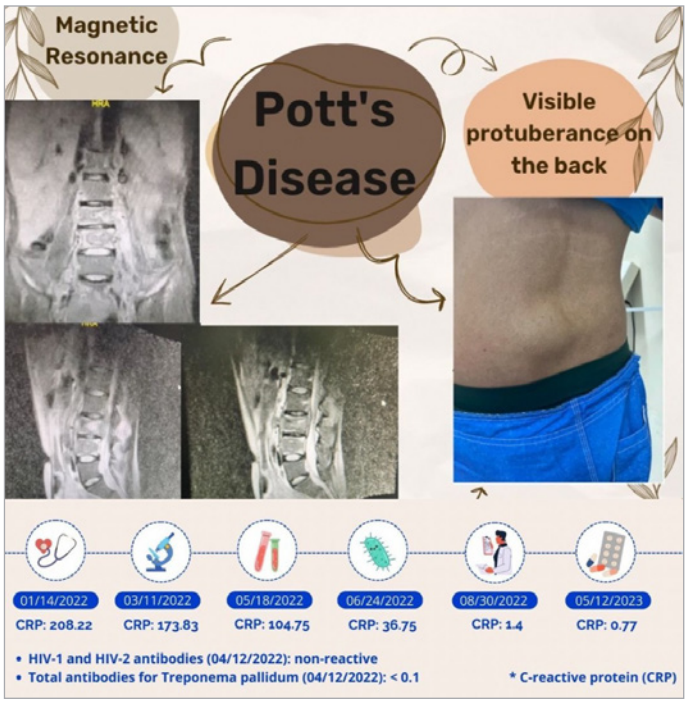

Figure 1. *Pott's Disease: Image and Laboratory Tests.*

[Abstract:2104]

NONSPECIFIC BRAIN SPACE OCCUPYING LESION OF PROSTATIC ORIGIN

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74-year-old male was brought to the Emergency Department for deterioration of consciousness and left hemiparesis with no signs of meningeal irritation. Skin lesions in the left hemiface and hemibody region due to prolonged immobility.

CT scan was performed showing non-specific LOE around the right lenticular nucleus. He progressively deteriorated with fever and shivering, and respiratory worsening that required OTI and vasoactive support. Diagnostic lumbar puncture was performed. Cerebrospinal fluid was found to be compatible with bacterial infection, so broad-spectrum antibiotic coverage was started.

Complementary tests were performed in order to rule out an infectious focus that could justify septic cerebral embolism. Thoracic-abdominal CT scan showed a large prostatic mass compatible with a large prostatic abscess with periprostatic extension in relation to abscessed prostatitis, multiple liver abscesses, acute venous thrombosis of the left internal iliac vein

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to the bifurcation of the ipsilateral common iliac vein and multiple bilateral pulmonary nodules compatible with septic embolism. Blood cultures, urine culture and CSF culture showed *Klebsiella pneumoniae* positive for ESBL. After this, prostatectomy was attempted and he suffered cardiorespiratory arrest during the procedure due to ventricular tachycardia and death.

We must make a broad differential diagnosis taking into account the infectious aetiology for a rapid diagnosis in those pathologies that threaten the patient's life. *Klebsiella pneumoniae* is a rare microorganism in CNS abscess infections. The hypervirulent pathotype involves hepatic and pulmonary abscesses. It is usually associated with a high rate of antibiotic resistance and high mortality.

Keywords: *Klebsiella, hypervirulent, CNS*

[Abstract:2125]

ROLE OF POCUS IN INFECTIOUS DISEASES: A CASE STUDY

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We present the case of a 30-year-old patient with no relevant personal history, referred to outpatient consultations for persistent fever and toxic syndrome.

Expanding on the medical history, the patient described the onset of symptoms with nonspecific abdominal discomfort, progressive intolerance to intake, accompanied by vomiting, and progressive weight loss. The patient reported not currently having pets but had previous contact with animals due to working on farms.

During the physical examination, the patient presented cachexia and generalized abdominal discomfort upon palpation, with a more pronounced focus on the right flank and hypochondria, with suspected associated hepatomegaly. Given the findings in the physical examination, a bedside ultrasound was performed (Figure 1), highlighting a hyper and hypoechoic lesion at the hepatic level without associated free fluid. Due to the suspicion of a hepatic abscess and a possible hydatid cyst, laboratory tests and serologies were requested. The patient was started on treatment with ceftriaxone and metronidazole, and they were admitted to the hospital ward.

During the hospital stay, an abdominal magnetic resonance imaging was performed, reported as a hepatic cystic lesion suggestive of a hydatid cyst, CE3B stage according to the WHO classification. A percutaneous drainage was placed. Serology results were received, positive for *Echinococcus granulosus*, so treatment with albendazole and praziquantel was initiated. The patient eventually underwent surgery, with a partial hepatectomy of segment VII, and had a good postoperative recovery. They completed two months of post-intervention treatment with no signs of recurrence in subsequent outpatient follow-ups.

Keywords: *POCUS, hydatid cyst, hepatic abscess, Echinococcus granulosus*

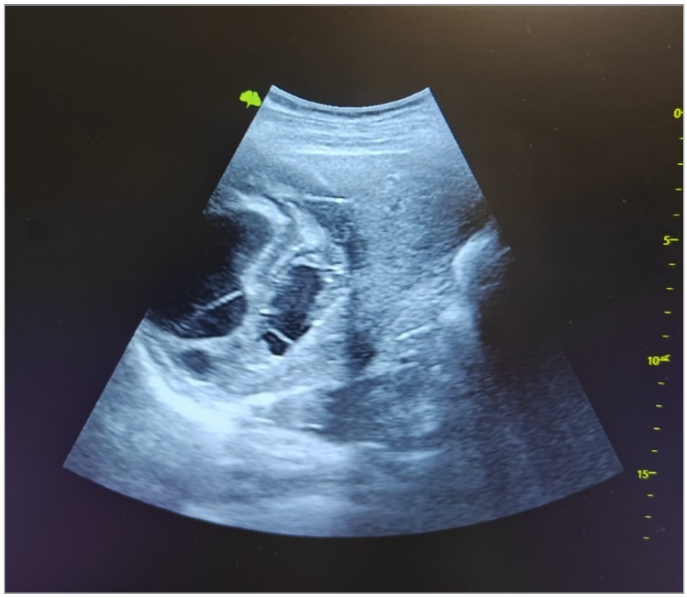

Figure 1.

[Abstract:2132]

NAVIGATING THE SHADOWS: ENHANCING TUBERCULOSIS DIAGNOSIS THROUGH PRECISION CLINICAL SUSPICION

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Tuberculosis (TB) caused by strains of *Mycobacterium tuberculosis* (MTB) complex is a pulmonary infection that remains a significant global health concern. 25-year-old female with no past medical history who presented with 3-month history of productive cough of green sputum and hemoptysis, associated with weight loss and night sweats. Patient is a resident of Haiti. CT chest showed extensive multifocal areas of airspace consolidation and cavitary nodules involving the upper lobes bilaterally with bronchiectatic changes and large cavitations of the upper lung fields. Started on RIPE therapy (rifampin, isoniazid, pyrazinamide and ethambutol) and vitamin B6 pyridoxine. MTB by PCR was detected. Acid-fast bacilli culture positive x 3.

The process of diagnosing tuberculosis initiates with a clinical suspicion of the disease, incorporating a detailed history and physical examination to evaluate the patient's TB risk. The identification of pulmonary TB is prompted by recognizing pertinent clinical symptoms and relevant epidemiological factors. Patients meeting these clinical criteria should undergo confirmatory testing. The diagnosis is definitively established by isolation of *M. tuberculosis* in a bodily secretion or fluid or tissue. Complementary diagnostic methods encompass sputum (AFB) smear and (NAA) testing. In individuals at risk for TB, a positive NAA test, whether or not accompanied by AFB smear positivity,

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is deemed adequate for the diagnosis of TB. Classic radiographic findings are focal infiltration of the upper lobe(s) or the lower lobe(s). Cavitation may be present, and inflammation and tissue destruction may result in fibrosis with traction and/or enlargement of hilar and mediastinal lymph nodes.

Keywords: *Mycobacterium tuberculosis, cough, haemoptysis*

[Abstract:2139]

ANALYSIS OF URINARY FOCUS BACTERAEMIA IN A SECOND LEVEL HOSPITAL

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Urinary origin bacteraemia registered during the year 2022 in our centre were analysed, collecting data about the causative microorganisms, antibiotic therapy, origin, department of extraction, admission to the ICU and mortality during the episode. Of the total 116 patients with bacteraemia, 75 (64.7%) correspond to men, and the mean age was 73.59 (DS 14.4) years. The origin was community in 46 (39.7%) cases, nosocomial in 20 (17.2%) cases and related to healthcare in 50 (43.1%) cases.

The most frequent microorganisms were *Escherichia coli* (49.1%), *Klebsiella pneumoniae* (16.4%), *Proteus mirabilis* (11.2%), *Pseudomonas aeruginosa* and *Staphylococcus epidermidis* (3.4%); *Staphylococcus aureus* (2.6%), *Enterobacter cloacae*, *Enterococcus faecalis* and *Enterococcus faecium* (1.7%). *Bacterioides fragilis*, *Citrobacter freundii*, *Enterobacter* spp., other Staphylococci coagulase negative, *Providencia stuartii*, *Salmonella enteritidis*, *Serratia marcescens* and *Staphylococcus hominis* 0.9%).

The most used antibiotics were: ceftriaxone (64.7%), tobramycin (9.5%), piperacillin/tazobactam (8.6%), ciprofloxacin (6%), meropenem and fosfomycin (5.2%), levofloxacin and gentamicin (4.3%), linezolid (2.6%), ertapenem, cefixime, azithromycin and amoxicillin/clavulanate (1.7%) and metronidazole, imipenem, daptomycin, cefuroxime and amikacin (0.9%). In 65 (56%) patients it was necessary to escalate antibiotic treatment due to clinical worsening. Treatment was adjusted based on the antibiogram in 69.8%) patients. It was sequenced oral treatment in 68 (58.6%) patients, with ciprofloxacin (30.9%), cefixime (17.6%), cefuroxime (14.7%), levofloxacin (13.2%), cotrimoxazole (7.4%), fosfomycin (5.9%), amoxicillin/clavulanate, cefditoren and linezolid (2.9%) and amoxicillin and nitrofurantoin (1.5%). A 9.5% of patients required admission to the ICU and 9.5% died.

Our centres urinary bacteraemia are mainly caused by Gram-negative bacilli with a moderate rate of multidrug resistance.

Keywords: *urinary bacteraemia, bacteriemias, antibiotics*

[Abstract:2146]

MEDITERRANEAN SPOTTED FEVER: A CLINICAL DIAGNOSIS

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Introduction: Mediterranean spotted fever, caused by *Rickettsia conorii* and transmitted to humans through ticks of the Rhipicephalus genus, is characterized by an acute clinical course with fever, maculopapular rash, and headache.

Case Presentation: A 77-year-old woman sought emergency care after a recent rural summer stay and untreated water exposure. She complained of two weeks of asthenia, nausea, and vomiting. On examination, she exhibited a fever (39°C) and an erythematous rash scattered on the trunk, with palmoplantar involvement. Analytically, acute kidney injury, normal urine sediment, and a slight elevation in transaminases were noted. Empirical antibiotic therapy with doxycycline (suspected Mediterranean spotted fever) and ceftriaxone (suspected severe leptospirosis) was initiated. During hospitalization, atypical crusty lesions on the right ankle and thigh were observed, possibly indicating inoculation eschars. On the second day, ceftriaxone was discontinued in favour of a higher likelihood of Mediterranean spotted fever, despite the atypical rash and eschars. Serological tests for *Rickettsia conorii* (IgG and IgM), blood PCR for *Rickettsia conorii*, and Leptospira PCR in blood and urine were negative, as well as HIV screening and non-reactive TPPA. The patient completed a 7-day course of doxycycline, showing favourable clinical and laboratory outcomes. Due to diagnostic uncertainty, a repeat serology two months post-discharge revealed positive IgG.

Conclusions: A negative serological result in the acute phase does not exclude the diagnosis, particularly within the first two weeks. DNA testing from blood or eschar tissue may be an alternative for diagnosis. Timely initiation of treatment is crucial, especially in cases of high suspicion.

Keywords: *rickettsia conorii, fever, rash, clinical diagnosis*

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[Abstract:2152]

CARDIOVASCULAR DISEASE IN PATIENTS WITH HUMAN IMMUNODEFICIENCY VIRUS (HIV), A DESCRIPTIVE STUDY OF HOSPITALIZATIONS BETWEEN 2018-2023 IN A TERTIARY CENTER

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Objectives: To analyse the characteristics of hospitalizations for cardiovascular disease(CVD) in patients living with HIV in a tertiary centre and compare them with admissions for other causes.

Materials and Methods: Retrospective observational-descriptive study. Hospitalizations between January 1, 2018 and January 31, 2023 with an HIV diagnosis were included.I nconclusive HIV laboratory tests were excluded, as well as contact and exposure studies to HIV. Those in whom CVD was the primary diagnosis were identified.

Results: 784 hospitalizations were collected, the mean age was 50 years, the mean stay was 12 days and 65.8% were men. Of which, 72 (9.2%) was hospitalized for CVD, 62 (81.6%) being men. The most common primary diagnosis in those hospitalized for CVD was acute non-ST elevation myocardial infarction (9) (Table 1). The median age (IQR) in those hospitalized for CVD was 61 (15) years and the median hospital stay (IQR) was 9 (11) days. However, in those hospitalized for other causes, the median age (IQR) was 50 (14) years, and the length of stay (IQR) was 7 (10) days. The Mann Whitney U test showed statistically significant differences in age and hospital stay between both groups($p<0.05$). Mortality during admission was 5.1% (40), none had been admitted for CVD, no differences in mortality were found.

Conclusions: The statistically significant differences in age and duration of hospital admission between both groups indicate that HIV patients admitted for cardiovascular disease are older than those admitted for other causes, and their hospital stays are longer. The growing volume of people living with HIV admitted for Cardiovascular Disease highlights that it is a common comorbidity in HIV patients who have aged and implies the need to control, in addition to HIV infection, cardiovascular risk factors.

Keywords: *human immunodeficiency virus, cardiovascular disease, cardiovascular risk factors*

Acute non-ST elevation myocardial infarction (NSTEMI)	9	12.5
Native coronary artery atherosclerotic heart disease with unstable angina pectoris	6	8.3
Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene	4	5.6
Type 2 diabetes mellitus with foot ulcer	3	4.2
Native coronary artery atherosclerotic heart disease with other forms of angina pectoris	3	4.2
Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene	3	4.2
Hypertensive heart disease with heart failure	3	4.2
Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end-stage renal disease	3	4.2
Hypertensive emergency	3	4.2
Angina pectoris, unspecified	2	2.8
Acute ST elevation myocardial infarction (STEMI) with involvement of the anterior descending coronary artery	2	2.8
Acute ST elevation myocardial infarction (STEMI) with involvement of another anterior coronary artery	2	2.8
Acute ST elevation myocardial infarction (STEMI) with right coronary artery involvement	2	2.8
Native coronary artery atherosclerotic heart disease without angina pectoris	2	2.8
Dilated cardiomyopathy	2	2.8
Heart failure, unspecified	2	2.8
Hypertensive chronic heart and kidney disease with heart failure and chronic kidney disease stages 1 to 4 or unspecified chronic kidney disease	2	2.8
Acute ST elevation myocardial infarction (STEMI) with involvement of another inferior coronary artery	1	1.4
Acute ST elevation myocardial infarction (STEMI) with involvement of the circumflex coronary artery	1	1.4
Atherosclerotic heart disease of the native coronary artery with unspecified angina pectoris	1	1.4
Non-rheumatic mitral (valve) stenosis	1	1.4
Stenosis with non-rheumatic aortic (valve) insufficiency	1	1.4
unspecified atrial fibrillation	1	1.4
Unspecified atrial flutter	1	1.4
Systolic (congestive) heart failure, acute	1	1.4
Systolic (congestive) heart failure, acute-on-chronic	1	1.4
Cerebral infarction due to unspecified occlusion or stenosis of the right carotid artery	1	1.4
Cerebral infarction due to right middle cerebral artery thrombosis	1	1.4
Cerebral infarction due to embolism of unspecified cerebral artery	1	1.4
Cerebral infarction due to right middle cerebral artery embolism	1	1.4

Table 1. *Frequency distribution of the main diagnoses in those hospitalized for cardiovascular disease.*

[Abstract:2156]

PREVALENCE OF MULTIDRUG RESISTANCE IN URINARY BACTERAEMIA DEPENDING ON THE MICROORGANISM AND ITS ORIGIN

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The types of resistance in bacteraemia were analysed, as well as their origin during the year 2022 in our centre, collecting data on the causative microorganisms and type of multi-resistance they presented. From 116 bacteraemia, 64.7% correspond to men. The mean age was 73.59 (SD 14.4) years. The origin was community in 39.7%) cases, nosocomial in 20 (17.2%) cases and healthcare-related (HR) in 43.1% cases. The most frequent microorganisms regardless of origin were *Escherichia coli*, *Klebsiella pneumoniae* and *Proteus mirabilis*. *Escherichia coli* caused 58.7% of community bacteraemia, 20% of nosocomial ones and 52% of HR ones. *Klebsiella pneumoniae* caused 13% of community bacteraemia, 30% of nosocomial ones and 14% of HR ones. *Proteus mirabilis* caused 8.7% of community bacteraemia, 20% of nosocomial ones and 10% of HR ones. In community bacteraemia, there were 3 isolations of a multidrug-resistant microorganism (MRM), with two cases of extended spectrum beta-lactamases (ESBL) and one case of AmpC; In those of nosocomial origin there were 4 MRM isolations (all ESBL), and in the HR there were 17 (30% ESBL, 4% AmpC). MRM were detected in 21.1% of *Escherichia coli* isolates, 3.7% in those of community origin, 25% in nosocomial isolates and 38.5% in HR ones, all of them ESBL carriers, with statistically

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significant differences (p=0.008). MRM were detected in 47.4% of *Klebsiella pneumoniae* isolates, 16.7% in those of community origin, 50% in nosocomial isolates and 71.4% in HR ones, without statistically significant (p=0.142). No multidrug resistance was found in *Proteus mirabilis* isolates.

Keywords: *urinary bacteriemia, bacteriemia, multidrug-resistant microorganism*

[Abstract:2157]

ANALYSIS OF URINARY BACTERAEMIA IN A SECOND LEVEL HOSPITAL

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Analyse bacteraemia of urinary origin in our centre, the most prevalent microorganisms and their antibiotic management.

Bacteraemia of urinary origin were analysed during the year 2022, collecting data of microorganisms and antibiotic therapy used.

Out of the total of 116 bacteraemia, 75 (64.7%) were in men, with a mean age of 73.59 (SD 14.4) years. The most frequent microorganisms were *Escherichia coli* with 57 (49.1%) isolations, *Klebsiella pneumoniae* with 19 (16.4%), *Proteus mirabilis* with 13 (11.2%). *Pseudomonas aeruginosa* and *Staphylococcus epidermidis* followed with 4 (3.4%) isolations each, and *Staphylococcus aureus* with 3 cases (2.6%), followed by *Enterobacter cloacae*, Enterococcus faecalis, and *Enterococcus faecium* with 2 (1.7%) cases. Only 1 (0.9%) isolation each was obtained for *Bacteroides fragilis*, *Citrobacter freundii*, other coagulase-negative *Staphylococci*, *Providencia stuartii*, *S. enteritidis*, *Serratia marcescens*, and *Staphylococcus hominis*.

The most used antibiotics initially were ceftriaxone in 75 (64.7%) cases, tobramycin in 11 (9.5%), piperacillin/tazobactam combination in 10 (8.6%), ciprofloxacin in 7 (6%), meropenem and fosfomycin in 6 (5.2%), levofloxacin and gentamicin in 5 (4.3%), linezolid in 3 (2.6%), ertapenem, cefixime, azithromycin, and amoxicillin/clavulanic acid in 2 (1.7%), and metronidazole, imipenem, daptomycin, cefuroxime, and amikacin in 1 (0.9%) case.

As a direct consequence of bacteraemia, 11 (9.5%) patients died.

Urinary origin bacteraemia at our centre are mainly caused by Gram-negative bacilli with a moderate rate of multiresistance. There is a high use of ceftriaxone as initial empirical antibiotic therapy.

Keywords: *urinary bacteraemia, infectious diseases, antibiotics*

[Abstract:2166]

WHERE DID IT COME FROM?

Isabel María Carmona Moyano, *María José Redondo Urda*, *Francisco Javier González Gasca*, *Ana María García Pérez*, *Marina Andrea Martínez Vacas*, *Miri Kim Lucas*, *Sandra Cruz Carrascosa*, *Beatriz González Castro*, *Beatriz La Rosa Salas*, *María Lourdes Porras Leal*

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An 86-year-old woman with a history of arterial hypertension, atrial fibrillation (AF), and past sigmoid cancer presented with constitutional symptoms. Her blood count showed no leucocytosis, Hb 11.6 g/dl, and elevated Ca 19.9. A body CT revealed lung nodules, initially thought to be infectious, possibly tuberculosis. However, Mantoux test and sputum smears for tuberculosis were negative, quantiferon was positive. A follow-up CT in six months revealed a new solid lung mass in the right upper lobe. Bronchoscopy was performed, revealing *Mycobacterium abscessus complex* (MABC) subspecies abscessus, resistant to clarithromycin, ciprofloxacin, and doxycycline. Treatment with amikacin, linezolid, moxifloxacin, and septrin showed good tolerance and evolution.

MABC, a group of nontuberculous mycobacteria, includes subspecies abscessus, masiliense, and bolletii. The first two have genetic patterns that provide resistance to macroglides. Increasing cases are attributed to common exposure, as MABC survives disinfectants in water sources. It causes tuberculosis-like lung disease, skin infections, bacteraemia, and more. Lung disease primarily affects those with underlying conditions, presenting as fibrocavitary or nodular bronchiectasis forms. The course is generally indolent but progressive, impacting lung function and quality of life.

Diagnosis involves clinical, microbiological, and radiological criteria, with genotyping to distinguish subspecies. Treatment varies, but a suggested regimen involves 18 months of multidrug therapy, aiming for symptomatic improvement and radiographic regression, as complete culture negativity can be unrealistic due to treatment toxicity. Recent findings suggest possible transmission between cystic fibrosis patients in hospitals. The complexity underscores the importance of accurate diagnosis and tailored treatment for MABC infections.

Keywords: *nontuberculosis mycobacteria's, constitutional syndrome, Mycobacterium abscessus complex*

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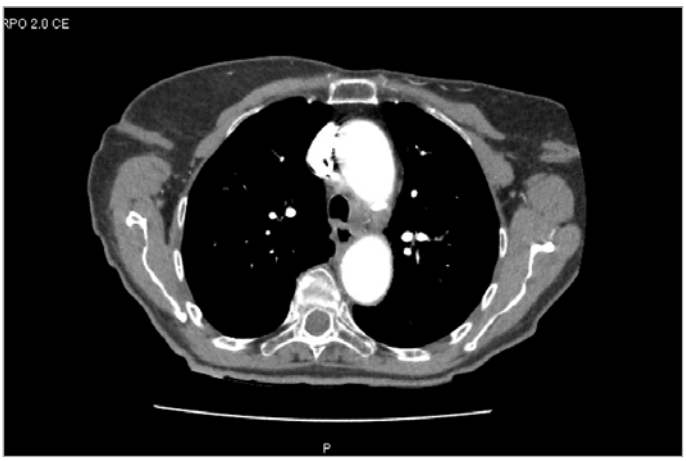

Figure 1. First CT.

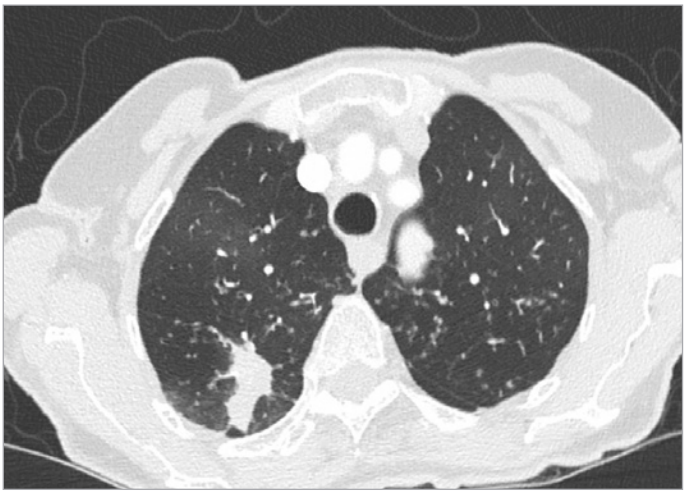

Figure 2. Second CT (after 7 months).

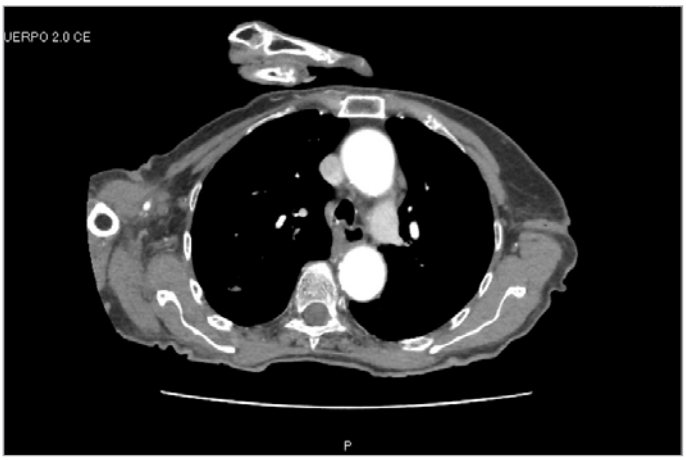

Figure 3. Third CT (after treatment).

[Abstract:2170]

HOSPITALIZATIONS DUE TO INFECTIOUS DISEASES IN PATIENTS WITH HUMAN IMMUNODEFICIENCY VIRUS (HIV) BETWEEN 2018-2023 IN A TERTIARY HOSPITAL. A DESCRIPTIVE STUDY

Paula Aragonés Pequerul[1], *Martín Gericó Aseguinolaza*[1], *Isabel Sanjoaquín Conde*[2], *María José Crusells Canales*[2], *Carla Toyas Miazza*[2], *Laura Acero Cajo*[1], *Pablo Sampietro Buil*[1], *María Sabina Gimeno Mingueza*[1]

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Objectives: To quantify the volume of population living with HIV admitted for infectious reasons to the reference hospital of Health Area III of Aragon. Hospitalizations for infectious diseases(IE) are compared with hospitalizations for other causes.

Materials and Methods: Retrospective observational-descriptive study. All hospitalizations between January 1, 2018 and January 31, 2023 whose discharge report included the diagnosis of HIV infection were included. Inconclusive HIV laboratory tests were excluded, as well as contact and exposure studies to HIV. Those in whom IE was the main diagnosis were identified.

Results: 784 hospitalizations were collected, the mean age (SD) was 50 (12) years, the mean stay (SD) was 12 (14) days and 65.8% (516) were men. 314 were hospitalized for IE, 192 (62.1%) being men. The median age (IQR) in those hospitalized for IE was 48 (17) years and the median hospital stay (IQR) was 9 (12) days. However, in those hospitalized for other causes, the median age (IQR) was 52 (13) years, and the length of stay (IQR) was 6 (9) days. The Mann Whitney U test showed statistically significant differences in age and hospital stay between both groups ($p<0.05$). Mortality during admission was 5.1% (40); no differences in mortality were found between groups. Among those hospitalized for IE, the most frequent diagnoses were HIV disease itself (107), COVID-19(17), influenza (13), and pneumonia due to an unspecified microorganism (10) (Table 1).

Conclusions: Those hospitalized for IE were younger and had a longer stay. In the population living with HIV, the reasons for admission due to infectious causes are becoming less frequent, in relation to the good immunovirological control achieved by current antiretroviral therapies.

Keywords: *human immunodeficiency virus, infectious diseases, hospitalizations*

DOI: 10.12890/2024_V11Sup1

Infectious diseases	Frequency	Percentage
Human immunodeficiency virus [HIV] disease	107	34.1
COVID-19	17	5.4
Flu	13	4.1
Pneumonia, unspecified organism	10	3.2
Human immunodeficiency virus [HIV] disease complicating childbirth	10	3.2
Anogenital (venereal) warts	9	2.9
Chronic obstructive pulmonary disease with exacerbation (acute) with superinfection	7	2.2
Acute pyelonephritis	7	2.2
Streptococcus pneumoniae pneumonia	5	1.6
Chronic obstructive pulmonary disease with acute lower respiratory tract infection	5	1.6
Enteritis due to Salmonella spp.	4	1.3
Fever, unspecified	4	1.3
Infectious gastroenteritis and colitis. unspecified	3	1.0
Sepsis, unspecified organism	3	1.0
Chronic viral hepatitis type C	3	1.0
Visceral leishmaniasis	3	1.0
Influenza due to other types of influenza viruses identified with another type of pneumonia specified	3	1.0
Bronchiectasis with acute lower respiratory tract infection	3	1.0
Acute salpingitis and oophoritis	3	1.0

Table 1. *Frequency distribution of the 20 most frequent main diagnoses in those hospitalized for infectious diseases.*

[Abstract:2181]

ANALYSIS OF MORTALITY DURING THE EPISODE, SURVIVAL IN FOLLOW-UP AND THE NEED FOR ADMISSION TO THE ICU OF URINARY BACTERAEMIA IN OUR CENTER DEPENDING ON THEIR ORIGIN

Martín Gericó Aseguinolaza[1], Pablo Sampietro Buil[1], Paula Aragonés Pequerul[1], María Sabina Gimeno Mingueza[1], Laura Acero Cajo[1], Teresa Romeo Allepuz[1], Fabiola Urquizar Ayén[1], Cristina García Dominguez[1], Izarbe Merino Casallo[1], Anxela Crestelo Vieitez[2], Maria Del Mar García Andreu[2], Cristina Gallego Lezaun[3]

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Urinary bacteraemia registered in our centre during 2022 were analysed, collecting data on ICU admission and mortality during the episode and survival during follow-up.

We analysed 116 bacteraemia, 64.7% correspond to men, the mean age was 73.59 (SD 14.4) years. The origin was community in 39.7% cases, nosocomial in 17.2% cases and healthcare-related (HR) in 43.1% cases. The overall mortality during the episode was 9.5%, being 6.5% in community bacteraemia, 25% in nosocomial bacteraemia, and 6% in HR, with statistically significant differences (p=0.034). 9.5% of the patients were admitted to the ICU, 13% being community, 10% nosocomial and 6% HR, without statistically significant differences (p=0.5). Of the patients transferred to the ICU there was a mortality of 27%. In the follow-up after discharge, there was a significantly lower survival in nosocomial bacteraemia compared to community and HR bacteraemia (Log Rank p <0.001). In the case of nosocomial bacteraemia, the median survival was 125 days (95% CI 26-223). Survival chart is attached.

A higher mortality was evident both during the episode and in the follow-up in nosocomial bacteraemia compared to community and HR ones. Various factors may influence this increase in mortality evidenced in the study, for example, nosocomial acquisition implies a greater risk of multidrug-resistant microorganisms. On the other hand, an admitted patient has a greater burden of pluripathology than an outpatient, which can favour mortality both due to the process itself and the underlying pluripathology.

Nosocomial urinary bacteraemia had significantly higher mortality during admission and during follow-up after discharge.

Keywords: *urinary bacteriemia, bacteriemia, mortality*

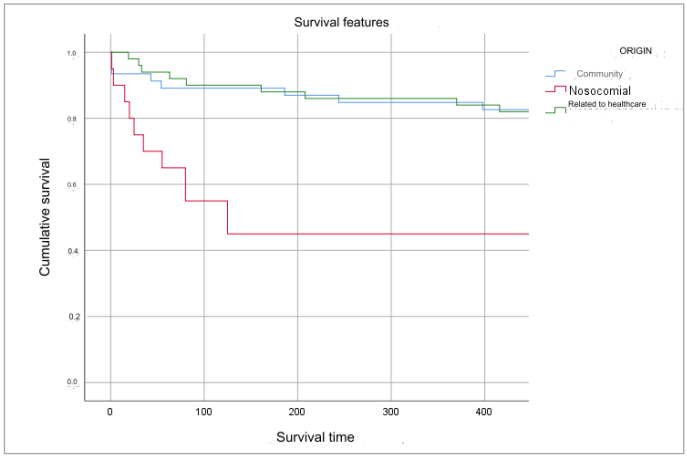

Figure 1. *Survival chart.*

[Abstract:2192]

ANALYSIS OF MORTALITY DURING THE EPISODE, SURVIVAL IN FOLLOW-UP AND ICU ADMISSION OF URINARY BACTERAEMIA IN OUR CENTER DEPENDING ON THE MULTIDRUG-RESISTANCE OF THE CAUSAL MICROORGANISM

Martín Gericó Aseguinolaza[1], Pablo Sampietro Buil[1], Paula Aragonés Pequerul[1], María Sabina Gimeno Mingueza[1], Laura Acero Cajo[1], Teresa Romeo Allepuz[1], Fabiola Urquizar Ayén[1], Cristina García Dominguez[1], Izarbe Merino Casallo[1], Anxela Crestelo Vieitez[2], Maria Del Mar García Andreu[2], Cristina Gallego Lezaun[3]

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We analysed 116 bacteraemia, 75 (64.7%) corresponded to men, the mean age was 73.59 (SD 14.4) years. MRM were isolated in 20.7% cases, the most frequent mechanisms of resistance were extended-spectrum beta-lactamases (ESBL) in 18.1% cases and AmpC-type beta-lactamases in 2.6% cases. Overall mortality during the episode was 9.5%. Among bacteraemia caused by non-MRM there was 8.7% mortality, while in those caused by MRM it was 12.5%, without statistically significant differences (p=0.57).

The 9.5% of patients were admitted to the ICU. Among bacteraemia caused by non-MRM, there were 10.9% of ICU admissions, while in those caused by MRM it was 4.2%, without

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statistically differences (p=0.32). In the follow-up at discharge, no significant differences were found between both groups (Log-Rank p=0.095), however, the Kaplan Meier graph shows a trend towards higher mortality in bacteraemia caused by MRM.
Although no statistically significant differences in terms of mortality during the process and follow-up have been found, there is a tendency for MRM bacteriemias to have higher mortality.
This could be due to the greater difficulty in correct antibiotic coverage, as well as due to the association of MRM with hospital and health care environments, where is a higher prevalence of frail patients.
No statistically significant differences were found in terms of mortality in the episode, the admission to the ICU and survival to discharge based on the participation of MRM; however, a trend of higher mortality can be seen in MRM caused bacteraemia. Studies with a larger sample or follow-up would be necessary.

Keywords: *urinary bacteriemia, bacteriemia, multidrug-resistant microorganism, mortality*

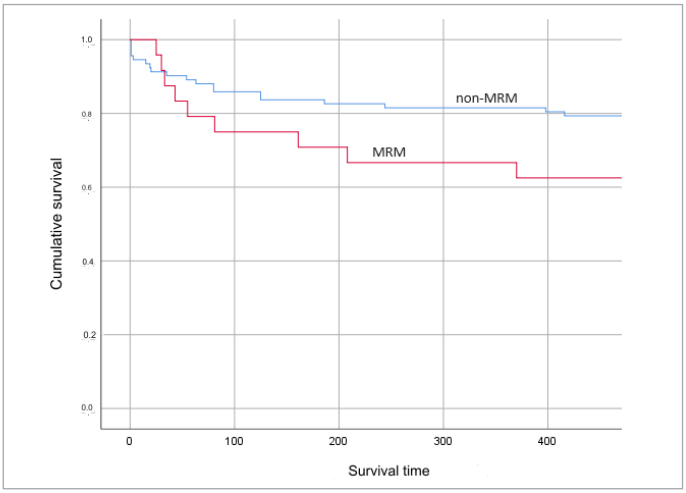

Figure 1. *Survival chart.*

[Abstract:2194]

CASE SERIES OF *LISTERIA MENINGITIS* IN A TERTIARY-LEVEL HOSPITAL: IMPORTANCE OF SUSPICION AND EARLY TREATMENT

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Objectives: To understand the characteristics of patients diagnosed with *Listeria monocytogenes* meningitis (LMM) in recent years and assess the morbidity and mortality associated with the infection.
Methods: Case series of twelve adult patients admitted with LMM at San Carlos Clinical Hospital in the last twelve years (2009-2021). Epidemiological, clinical, microbiological, radiological, and therapeutic variables were described.
Results: Twelve patients with LMM were recorded (mean age 67.5 years, 75% males). Fever was the presenting symptom in 92%, followed by headache (75%) and decreased level of consciousness (58%). Although Gram staining was negative in ten out of twelve cases, eight showed positive cultures for L. monocytogenes. Polymerase chain reaction (PCR) in cerebrospinal fluid (CSF) was positive in the two cases where the test was performed. Empirical treatment included ampicillin in 75% of cases and corticosteroids in 42%. Targeted treatment in all cases consisted of ampicillin for 21 days, with the addition of gentamicin in seven cases. Complications were observed in a quarter of cases, with a single fatality.
Conclusions: *Listeria monocytogenes* meningitis (LMM) is a rare and challenging-to-diagnose disease. In our case series, mortality was low, and empirical antibiotic therapy included ampicillin in nine patients, with favorable outcomes in seven of them. The addition of ampicillin to empirical treatment for bacterial meningitis may enhance the prognosis of infections caused by *Listeria monocytogenes*.

Keywords: *Listeria monocytogenes, meningitis, ampicillin, empirical treatment*

[Abstract:2199]

ANALYSIS OF MORTALITY DURING THE EPISODE, SURVIVAL IN FOLLOW-UP AND THE NEED OF ADMISSION TO THE ICU FOR URINARY BACTERAEMIA IN OUR CENTER DEPENDING ON ITS ORIGIN

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Objectives: Analyse mortality during the episode, survival in follow-up, and the need for Intensive Care Unit (ICU) admission in urinary focus bacteraemia from our centre based on their origin.
Materials and Methods: Urinary bacteraemia were analysed during the year 2022 at our centre, collecting data on ICU admission, mortality during the episode, and survival in follow-up.
Results: Out of a total of 116 bacteraemia, 75 (64.7%) were in men, with a mean age of 73.59 (SD 14.4) years. The origin was community-acquired in 46 (39.7%) cases, nosocomial in 20 (17.2%) cases, and related to healthcare assistance (RHA) in 50 (43.1%) cases. The mortality during the episode was 9.5% (11 cases), with 6.5% (3) in community-acquired bacteraemia, 25% (5) in nosocomial origin, and 6% (3) in RHA. There were statistically significant differences in mortality based on origin (p=0.034).

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9.5% (11) of patients required ICU admission, with 13% (6) from community-acquired, 10% (2) from nosocomial origin, and 6% (3) from RHA. No statistically significant differences were found regarding the need for ICU admission based on origin (p=0.5).
In follow-up, there was significantly lower survival in nosocomial origin bacteraemia compared to community-acquired and RHA bacteraemia (Log Rank p<0.001). In nosocomial origin bacteraemia, the median survival was 125 days (95% CI 26-223). A survival graph is attached (Figure 1).
Conclusions: Urinary focus bacteraemia of nosocomial origin showed significantly higher mortality during admission and in follow-up. Further studies are needed to draw stronger conclusions.

Keywords: *survival, urinary bacteraemia, origin of bacteraemia*

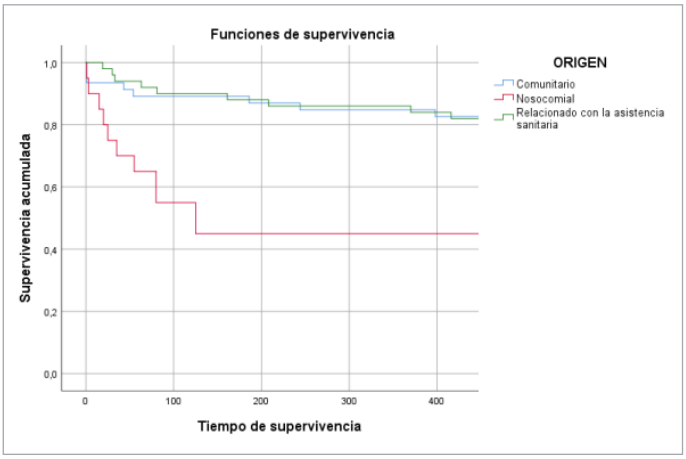

Figure 1. *Mortality in bacteraemia related with its origin. The image shows how nosocomial bacteraemia have a higher rate of mortality than the other two groups.*

[Abstract:2206]

ATTITUDES AND BELIEFS ABOUT PEOPLE LIVING WITH HIV IN MEDICAL STUDENTS

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The objective of this study is to find out the differences between the degree of stigma and beliefs and attitudes towards HIV infection in the general Spanish population (GSP) compared to medical students (MS). Several questions were selected to do a questionnaire called "Evolution of the GSP's beliefs and attitudes towards people living with HIV from 2008-2021". The survey was done through Google Forms the days before the start of the Infectious Diseases course at the Valladolid Medical School.
As result, the mean age was 20.95, being 78.3% female, 18.3% male, and 3.3% gender-non-conforming.
According to their knowledge of transmission routes, they answered the following (table 1): on the therapeutic advances regarding HIV, only 41% are aware of the existence of drugs capable of preventing HIV infection (49% in GSP), while the concept of undetectable=untransmittable is recognized by 41.7% (35.7% in GSP).
Regarding the highest degree of relationship They would have with people living with HIV 48.3% would have a steady partner, while 8.3% wouldn't have any relationship at all (12.2% and 10.3% respectively in GSP).
Shockingly, the level of knowledge about HIV in future doctors is lower than in GSP in several aspects. However, this is not transmitted in negative feelings or avoidance towards people living with HIV.
Infectious disease subject may provide an opportunity for their training in concepts that may later be the key in terms of stigma regarding people living with HIV the degree of suspicion of infection, and the possibility of early diagnosis and treatment.

Keywords: *HIV, stigma, people living with HIV*

Very or fairly likely	Medical students	General population
% incorrect answers		
Sharing a glass	10.2	11
Use of public toilets	18.3	9
Sneeze	11.7	8.3
Insect bite	26.3	21.3
% correct answers		
Use the same needle or blade	91.8	95.6
Sex without condom	96.7	95.3
Breast milk	62.7	22

Table 1. *Knowledge of transmission routes.*

[Abstract:2210]

A CURIOUS CASE OF TOXOPLASMOSIS

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42-year-old male with a previous diagnosis of type 1 human immunodeficiency virus (HIV) and cecal adenocarcinoma, both untreated; presented to the emergency room with left hemiplegia and transient language alteration. Brain computed tomography revealed multiple lesions with vasogenic oedema and regional mass effect on right frontoparietal hemisphere leading to the diagnostic hypothesis of brain metastases. He was admitted for further investigation.
Hypothesis: Cecal adenocarcinoma brain metastases or opportunistic infection. Lumbar puncture revealed increased cerebrospinal fluid (CSF) protein, without pleocytosis; polymerase

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chain reaction (PCR) for JC virus, *Epstein-Barr* virus, *Mycoplasma tuberculosis*, *Cryptococcus neoformans* and *Toxoplasma gondii* were negative; blood cultures negative; serum *T. gondii* IgG positive, CD4+ 26.05 cells/ µL, viral load of 87,455 copies/mL. Brain magnetic resonance (MRI): probable cerebral toxoplasmosis abscesses and vasogenic oedema.

Therapy with pyrimethamine, clindamycin and calcium folinate was started, as well as antiretroviral therapy (ART). After 15 days, MRI reevaluation revealed marked improvement of lesions. He was discharged, keeping follow-up in the infectiology department.

In patients infected with HIV and CD4 count <100 cells/µL, toxoplasmic encephalitis is the most common central nervous system infection.

Early diagnosis of cerebral toxoplasmosis is often presumptive, based on typical clinical and imagiologic findings and IgG positive *T. gondii* in patients with CD4+ <100 cells/µL. CSF PCR for *T. gondii* is positive only 44-65% of cases. The authors highlight this case and emphasize the importance of diagnostic suspicion even in the presence of negative serologies. The preferential treatment is the combination of sulfadiazine and pyrimethamine, as well as initiation of ART.

Keywords: *cerebral toxoplasmosis, CSF, CD4*

[Abstract:2213]

IF BACTERIAL ENDOCARDITIS WAS NOT ENOUGH, HERE'S A FUNGAL ONE

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Man, 80 years, autonomous. History of cardiovascular risk factors and implantation of aortic bioprothesis because of severe symptomatic stenosis; recent acute endocarditis of bioprosthetic aortic valve by methicillin resistant *Staphylococcus epidermidis* (MRSE); atrial fibrillation with pacemaker and substitution of electrocatheter in the context of vegetation caused by acute endocarditis. Admitted to the hospital electively, one year after acute bacterial endocarditis, with fever of unknown origin, prostration, anorexia, back pain and high infection values. Cultural exams were taken.

With the above history antibiotherapy was initiated with ceftriaxone, gentamicin and vancomycin. Blood cultures tested positive to *Candida metapsilosis* reason why caspofungin 50mg/ day was added. The transesofagic echocardiogram showed two vegetations in the aortic bioprosthetic valve, without vegetation in the electrocatheter, surgery was not an option. CT scan of the dorsolombar column excluded spondylodiscitis.

Admitted for 103 days with staying in the ICU for acute kidney injury. With persistent fungemia with caspofungina (31 days) and synergic voriconazol (22 days) therapy switch was done to amphotericin B (10 weeks) and flucitosin (suspended because of pancytopenia). After 38 days of antifungal therapy sterile blood cultures were obtained and therapy was continued for another 8 weeks.

Discharged from the hospital with reduced vegetations, without valve complications, with itraconazol ad eternum.

Rare case of acute fungal endocarditis to *Candida metapsilosis*, in patient with history of acute bacterial endocarditis of bioprosthetic valve and pacemaker to MRSE one year before. Besides the severe prognostic and recurrence of the disease, the outcome was good.

Keywords: *endocarditis, fungal, itraconazol*

[Abstract:2215]

INFLUENCE OF THE NEED FOR ANTIBIOTIC ESCALATION AND EMPIRICAL COVERAGE OF MULTIRESISTANT MICROORGANISMS ON MORTALITY AND THE NEED FOR ICU ADMISSION IN URINARY BACTERAEMIA

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We analysed 116 bacteraemia, with a mean age of 73.59 (SD 14.4) years, of which 64.7% corresponded to male patients. In the 56% was necessary to escalate empirical.

Empirical coverage of extended-spectrum beta-lactamases (ESBL) carriers was carried out in 7.8% cases and for multidrug-resistant gram-positive cocci (MRGPC) in 3.4% cases. Overall mortality during the episode was 9.5%.

Among patients in whom antibiotic therapy was escalated, it was 6.2%, while in those who not 13.7%, without statistically significant differences (p=0.167). Mortality during the episode in patients in whom ESBL coverage was performed was 22.2%, while in those who 8.4%, without significant differences (p=0.174).

In patients with MRGPC coverage, mortality was 25% while in those without was 8.9%, without statistically significant differences (p=0.281). The 9.5% required admission to the ICU. Of the patients in whom antibiotic therapy was escalated, 12.3% were admitted to the ICU, while 5.9% were admitted to the ICU in those who not, without statistically significant differences (p=0.241). The need for ICU admission during the episode in patients in whom ESBL coverage was performed was 33.3%, while in those who not 7.5%, with statistically significant differences (p=0.011). The need for ICU admission in patients in whom MRGPC coverage was performed was 75%, while in those who not 7.1%, with statistically significant differences (p< 0.001). There were no

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differences in follow-up at discharge based on escalation, ESBL or MRGPC coverage (LogRank p=0.634; p=0.371 and p=0.875 respectively).

Keywords: *urinary bacteriemia, bacteriemia, multidrug-resistant microorganism*

[Abstract:2226]

NEUROLISTERIOSIS: A CASE REPORT

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Case Description: A 79-year-old woman with a history of medicated epilepsy admitted due to altered consciousness and diarrhoea.

Upon admission: Glasgow Coma Scale of 11, tachycardic, without meningeal signs. During the emergency department stay, she experienced a generalized tonic-clonic seizure requiring four different antiepileptic drugs. Analytically, there was a slight elevation in inflammatory parameters. The electroencephalogram showed no epileptiform activity but revealed a pattern of diffuse cerebral encephalopathy, particularly in the left temporal region. Cerebral CT scan without acute changes, and lumbar puncture results were not suggestive of bacterial meningitis. Blood and urine cultures were collected. She was admitted with a probable diagnosis of herpes encephalitis and started on acyclovir.

Clinical Hypothesis: Central nervous system infection.

Diagnostic Pathways: Upon admission to the hospital, she was febrile, with a significant increase in inflammatory biomarkers. The urine and blood cultures were negative, and the cerebrospinal fluid Gram stain was non-microbial. On the 4th day of hospitalization, molecular biology testing was positive for *Listeria Monocytogenes*, and targeted antibiotic therapy was initiated. A Magnetic Resonance imaging was requested, revealing a frustrated hyperintense signal in T2 in the medial region of the left thalamus. With the initiated treatment, the patient showed significant improvement in the neurological condition, returning to her usual clinical state without signs of epileptic activity.

Discussion and Learning Points: Diagnosing neurolisteriosis is a challenge. Gram tests have low sensitivity for *"Listeria"* detection, so if clinical suspicion is high, empirical antibiotic therapy should be initiated, especially in high-risk groups, such as the elderly.

Keywords: *neurolisteriosis, epilepsy, altered consciousness, Gram stain*

[Abstract:2227]

AN OLD DISEASE HIDDEN IN SIGHT

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Neurosyphilis is a central nervous system infection caused by spirochete *Treponema pallidum*, which can occur at any time after primary infection. Incidence of syphilis has been rising since the year 2000 with neurosyphilis likely increasing as well. The spectrum of neurologic manifestations of syphilis is wide, and its sequelae can be persistent, demanding a high clinical suspicion to perform a diagnosis. Syphilis can affect any eye structure which may be the initial presentation of this infection, possibly causing permanent visual loss. We present a case of a 54-year-old male, with a personal history of type 1 diabetes and chronic gastritis, who attends the emergency department with sudden blurred vision, tearing and intense ocular pain in the right eye, holocranial headache and photophobia for the previous 3 days. He reported high-risk sexual behaviour with a new partner in the last 4 months. Physical examination showed a mild palpebral ptosis, conjunctival hyperemia, anisocoria with fixed myosis and decreased visual acuity of the right eye. Subsequent observation by an ophthalmologist revealed a hypopyon, vitritis, posterior synechiae, cataract and intraocular hypertension compatible with panuveitis. Complementary blood examination including serologies showed rapid plasma reagin titer 1:128 and positive total syphilis antibodies. He was admitted at the Infectious Disease Department. A lumbar puncture was made detecting mononuclear pleocytosis, increased protein and positive venereal disease research laboratory test on cerebral spinal fluid, consistent with neurosyphilis. After 10 days of penicillin and eye drops treatment, he reported headache and ocular pain improvement but maintained blurred vision and photophobia.

Keywords: *neurosyphilis, panuveitis, sexually transmitted infection*

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[Abstract:2236]

INFLUENCE OF ANTIBIOTIC DE-ESCALATION ACCORDING TO ANTIBIOGRAM AND ORAL TREATMENT SEQUENCING ON MORTALITY AND ICU ADMISSION IN URINARY BACTERAEMIA

Pablo Sampietro Buil[1], *Martín Gericó Aseguinolaza*[1], *María Luisa Monforte Cirac*[2], *Carmen Aspiroz Sancho*[2], *Paula Aragonés Pequerul*[1], *María Sabina Gimeno Mingueza*[1], *Laura Acero Cajo*[1], *Teresa Romeo Allepuz*[1]

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Materials and Methods: Urinary bacteraemia were analysed in our centre during the year 2022, collecting data on antibiotic de-escalation according to the antibiogram, oral treatment sequencing, ICU admission, mortality, and follow-up survival.

Results: 116 bacteraemia were analysed, with a mean patient age of 73.59 (SD 14.4) years, of which 75 (64.7%) were male. Treatment adjustment based on the antibiogram was performed in 81 (69.8%) patients. Treatment sequencing to oral administration was done in 68 (58.6%) patients.

The overall mortality during the episode was 9.5% (11 cases). Patients without adjustment mortality was 25.7% (9 cases), with statistically significant differences (p<0.001). Mortality during the episode in patients with treatment sequencing to oral administration was 1.5% (one case), while in those without sequencing, it was 20.8% (10 cases), with statistically significant differences (p<0.001).

During the episode, 11 patients (9.5%) required admission to the ICU. Among patients with antibiotic adjustment according to the antibiogram, 7 (8.6%) were admitted to the ICU, while in those without adjustment, 4 patients (11.4%) were admitted, with no statistically significant differences in the need for ICU admission (p=0.638). In follow-up, there was a significantly higher survival in patients with antibiotic adjustment based on the antibiogram (Log Rank 22.596 p<0.001) and in those with treatment sequencing to oral administration (Log Rank 17.879 p<0.001). Survival graph is attached.

Conclusions: Antibiotic de-escalation according to the antibiogram and sequencing to oral treatment were associated with lower mortality during the episode and in follow-up. There were no differences in the need for ICU admission.

Keywords: *urinary bacteraemia, de-escalation treatment, sequencing treatment*

Figure 1. *Survival depending on sequencing oral treatment. The graph shows up how patients who were able to change treatment to oral had higher survival rate.*

[Abstract:2240]

"PATIENT WITH MUCORMYCOSIS WHO IS DIABETIC, IMMUNOSUPPRESSED AND HAS A HISTORY OF INTERMITTENT DIALYSIS"

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Mucormycosis is an acute or subacute, life-threatening infection that develops with fungi of the order Mucorales and is characterized by vascular invasion and tissue necrosis. The causative agents of mucormycosis are mould fungi commonly found in nature and may occur in different species. Rhizopus species, Mucor species and *Cunninghamella bertholletiae* are the most important causes of mucormycosis. Members of the order Mucorales are fungi common in nature and are mostly isolated from soil, rotten fruits and vegetables, and mouldy bread.

In this article, immunosuppressed patients with liver transplant and a history of intermittent dialysis are discussed. A case of rhinocerebral mucormycosis is presented.

Keywords: *mucormycosis, liver transplant, rhinocerebral mucormycosis*

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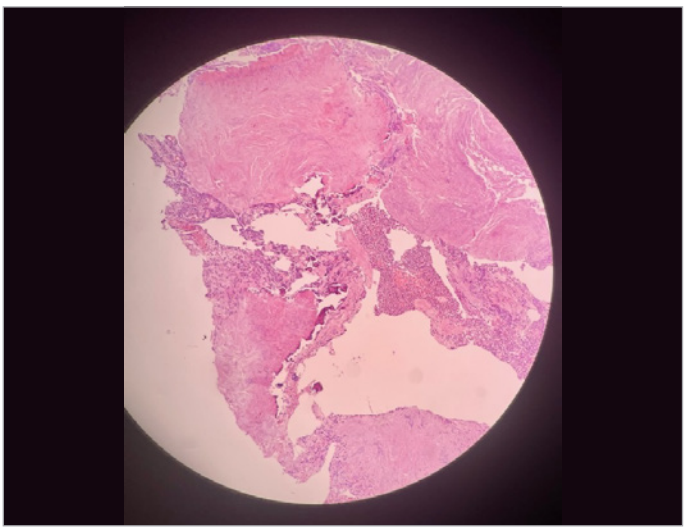

Figure 1. *Sphenoid sinus.*
Necrosis in the sphenoid sinus, fungal hyphae.

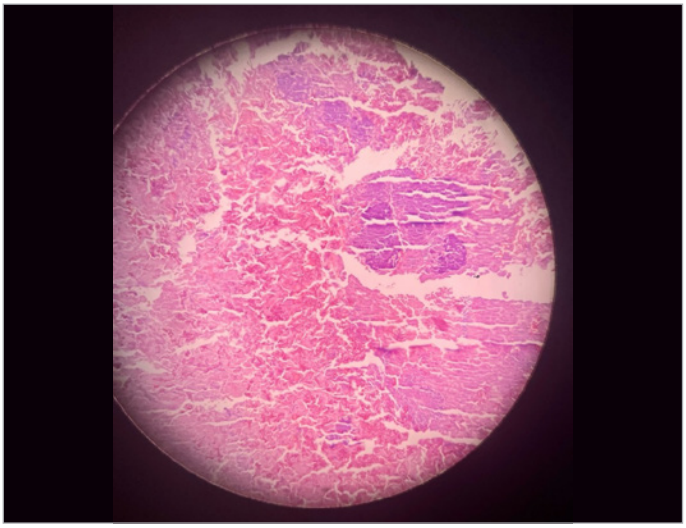

Figure 2. *Sphenoid sinus.*
Necrosis in the sphenoid sinus, fungal hyphae.

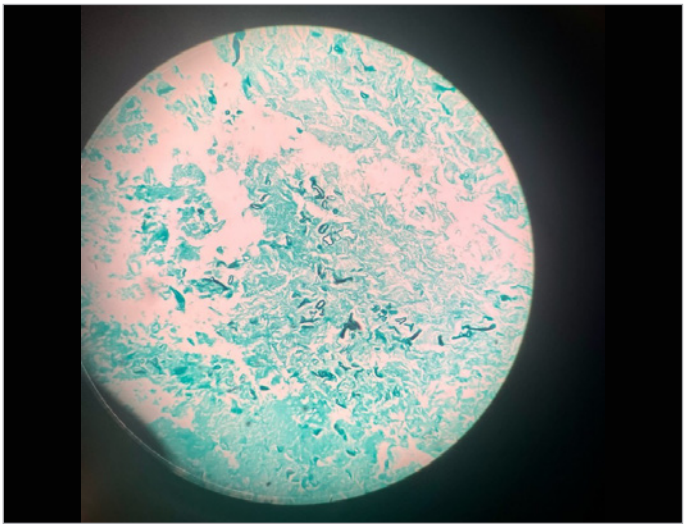

Figure 3. *Sphenoid sinus.*
Necrosis in the sphenoid sinus, fungal hyphae.

[Abstract:2248]

PRESSURE ULCERS - MINIMAL ANTIBIOTIC USAGE APPROACH

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Summary: Pressure ulcers represent a significant source of morbidity and mortality that has become more prevalent as a cause of hospitalisation over the years. They also present a difficult challenge as a reservoir for antibiotic resistant hospital microorganisms. Current evidence supports the use of short cycles of antibiotics (usually consisting of 7-10 days), however longer cycles are often used.

Purpose: We aim to present a case report that shows and reinforces that with a short cycle of antibiotics and adequate wound care a very favourable result is achievable, allowing for shorter treatment cycles and preventing antibiotic resistance.

Methods: A patient with an infected stage IV ulcer was admitted to the internal medicine ward. Pus and blood cultures were obtained. The evolution of the ulcer was monitored and recorded for a period of two months.

Findings: The pus culture was positive for *Staphylococcus aureus* methicillin-sensible and *Streptococcus anginosus* (multi-sensible). The patient was given trimethoprim-sulfamethoxazole and tigecycline for 10 days, allied together with nursing bandage care and negative pressure wound therapy. The treatment was very successful, the initial infection was treated and the ulcer progressively closed over evolving from stage IV to stage I during this period of two months.

Conclusions: A symbiotic relationship between the medical and nursing team allows for better results with a lesser use of antibiotics, even in more advanced stages of pressure ulcers.

Keywords: *ulcer, antibiotic, nursing care*

[Abstract:2265]

AIDS AND EPILEPSY: AN UNEXPECTED LINK

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Primary central nervous system lymphomas (PCNSL) account for up to 15% of non-Hodgkin lymphomas in human immunodeficiency virus (HIV) patients. We report a case of an undiagnosed AIDS patient presenting with a new-onset seizure caused by a PCNSL.

A 57-year-old male with unknown medical history was admitted following a new-onset seizure. Physical examination revealed

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impaired consciousness and right hemiparesis. Cranioencephalic CT scan and MRI scan revealed a necrotic lesion in the left frontal lobe with perilesional oedema. Lumbar puncture showed cerebrospinal fluid (CSF) with discrete proteinorrachia, normoglycorrachia, without pleocytosis. Thoraco-abdomino-pelvic CT revealed a perianal skin ulcer. HIV-1 serology was positive, CD4+ count 14 cells/μL, viral load 3,890,000 copies/mL. Patient started antiretroviral therapy. Brain lesions were initially attributed to toxoplasmosis and was treated with pyrimethamine and clindamycin. Polymerase chain reaction (PCR) from perianal ulcer samples was positive for *Cytomegalovirus* (CMV) and biopsy suggested *Herpesvirus* infection, leading to a diagnosis of CMV viremia (viral load:1,320,000 copies/mL) and central nervous system infection with positive CMV and *Epstein-Barr* virus PCR positive on CSF. Treatment with valganciclovir was started but the patient developed dysphasia and right hemiplegia. Subsequent MRI indicated a possible lymphoma. Biopsy confirmed diffuse large B cell lymphoma with EBV-encoded small RNAs (EBER) halting toxoplasmosis therapy. Despite methotrexate, procarbazine and vincristine treatment, the patient posteriorly died.

Toxoplasmosis and PCNSL are both opportunistic complications in AIDS patients. In our patient, wasted time until PCNSL diagnosis may have contributed to the outcome. Among patients with HIV-related PCNSL, worse outcomes are described with positivity for EBER.

Keywords: *EBER, AIDS, lymphoma*

[Abstract:2272]

HERPES SIMPLEX ENCEPHALITIS

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Herpes Simplex Virus 1 (HSV-1) can lead to fatal encephalitis. Common symptoms include fever, headache, seizures, and altered consciousness. Early diagnosis and treatment are crucial to prevent complications.

A 67-year-old male who has hypertension, alcohol and tobacco abuse, was admitted after a head injury. On physical examination, he had fever, confusion, tachycardia and 80% of peripheral oxygen saturation. Diagnostic tests revealed neutrophilia, elevated C-reactive protein, acute kidney injury and hyponatremia (120 mmol/L) due to thiazidic diuretic. Chest X-ray had a right inferior lung consolidation. Head CT scan showed a small frontal epicranial bleeding.

He was admitted in the Internal Medicine Department with the diagnosis of Community Acquired Pneumonia, hyponatremia and minor traumatic head injury (TBI) and started antibiotics and sodium correction. Despite treatment, he developed progressive respiratory failure and deterioration of consciousness (GCS 7) which led to intubation. At the Intensive Care Unit admission, he presented signs of central nervous system infection (fever, stiffness, left hemiplegia, myoclonus). A lumbar puncture was performed, and cerebrospinal fluid examination showed pleocytosis and hyperproteinorrhacia. Empirical treatment with ceftriaxone, vancomycin, ampicillin and acyclovir was started but after a positive Polymerase Chain Reaction to HSV-1, he continued therapy only with acyclovir. Electroencephalogram indicated focal status epilepticus, which was treated with anticonvulsivant drugs. Patient exhibited progressive clinical improvement and all neurologic signs resolved.

The severity of neurological signs and its dissociation with head CT scan results suggested other diagnoses beyond TBI. Patient's alcoholism history, possible withdrawal syndrome, hyponatremia and a simultaneous respiratory infection contributed to a delayed diagnosis.

Keywords: *Herpes simplex, virus, encephalitis*

[Abstract:2287]

LARGE SPINAL ABSCESS - MUCH MORE THAN LOWER BACK PAIN

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Spinal epidural abscess, an infection of the epidural space, is a rare event and associated with high mortality and morbidity. The triad of back pain, fever, and neurologic deficits occurs in a minority of patients, and treatment usually involves prolonged antibiotic therapy and very often surgery.

A 44-year-old man with a history of IV drug usage was admitted with a 3-day history of fever and lower back pain. Physical examination did not reveal neurological deficit. Lumbar tomographic scan revealed a herniated disc (L5-S1) with bilateral radicular involvement. Progression to refractory back pain, persistent fever, altered level of consciousness, and meningeal signs. CSF was cloudy, yellowish with high protein levels and negative culture. Spinal MRI showed a large epidural abscess with no cord compression, L3-L4 spondylodiscitis and bilateral abscess in psoas muscle. Blood cultures revealed a methicillin-susceptible *Staphylococcus aureus* and a transthoracic echocardiogram excluded signs of endocarditis. He was evaluated by a multidisciplinary surgical team and the need for vertebral intervention was excluded due to the absence of spinal cord involvement, but he underwent drainage of the abscessed lesion. He received an initial EV antibiotic therapy for about 6 weeks (ceftriaxone) and a later oral trimethoprim-sulfamethoxazole according to the antibiogram for a combined total of 18 weeks until symptom resolution and almost complete regression of the

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lesions documented on imaging studies.
In this case, timely recognition of the severity of the pathology and correct antibiotic treatment resulted in a good outcome without surgical treatment.

Keywords: *spinal abscess, drug usage, bacteriemia*

[Abstract:2296]

IMPORTANCE OF CLINICIANS' AWARENESS

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Case Description: A 20-year-old female patient, who had been experiencing abdominal pain, loss of appetite, and weight loss for the last three months, was the patient. She had no history of chronic disease or smoking. She belonged to low socio-economic status. No significant family history was present. At physical examination she was pale with normal vital signs. While examining the abdomen, she had cough with each deep inspiration. When asked she said that she had cough for two years and had family members coughing in the same house. The blood test revealed she had anaemia (HGB 9.29, MCV 79) with elevated CRP (64.55), ESR (39), ferritin (234) levels.
Clinical Hypothesis: Tuberculosis, endocarditis, malignancies and SLE.
Diagnostic Pathways: Three sputum specimens were collected for EZN staining and 2 of them were positive for. Chest X-ray and echocardiography without relevant changes. CT thoracoabdominopelvic showing cervical, mediastinal, ileocecal lymphadenopathies. In the upper lobe apical segments of both lungs, the largest AP diameter is 36 mm on the right and 15 mm on the left. Measured cavitary lesions, enlarged air bronchogram in the posterior segment of the upper lobe. Consolidations and traction bronchiectasis are observed. Budded tree appearance, centrilobular nodules are observed. The patient treated with rifampicin/isoniazid, ethambutol and pyrazinamide.
Discussion and Learning Points: Patient may not always tell us main complaint, clinicians should be careful about patient's not only clinical findings but also socioeconomic status. Tuberculosis is present in all countries and age groups and is the second leading infectious killer after COVID-19.

Keywords: *tuberculosis, cough, anaemia, inflammation*

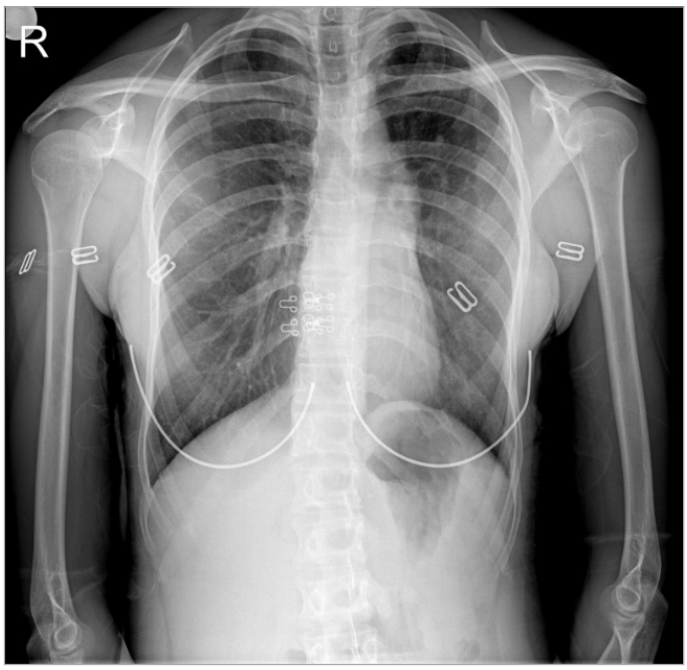

Figure 1. *Chest X-ray.*

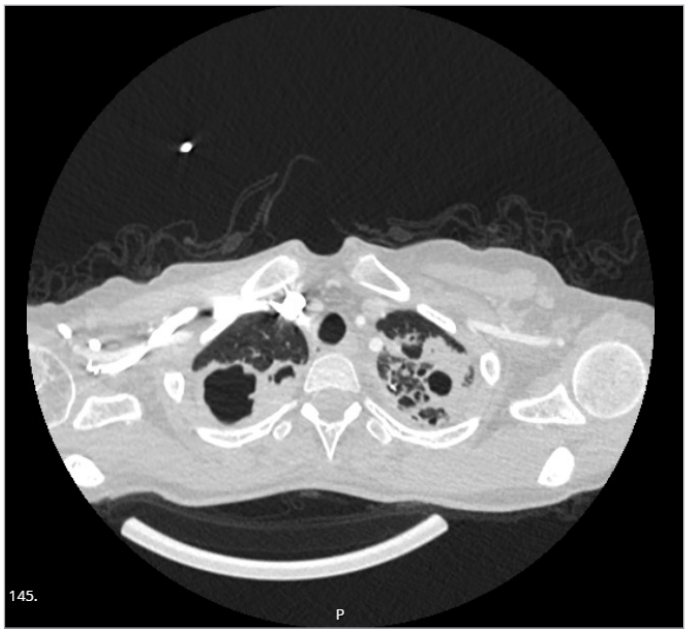

Figure 2. *CT scan-1.*

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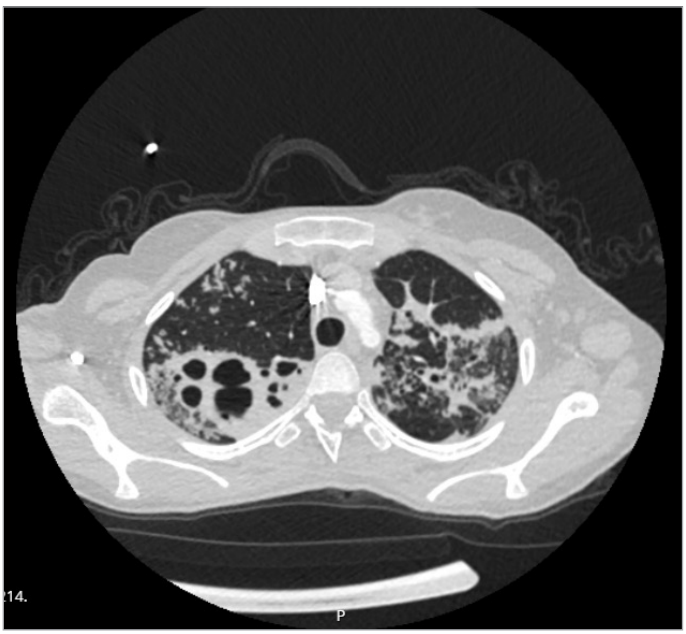

Figure 3. CT scan-2.

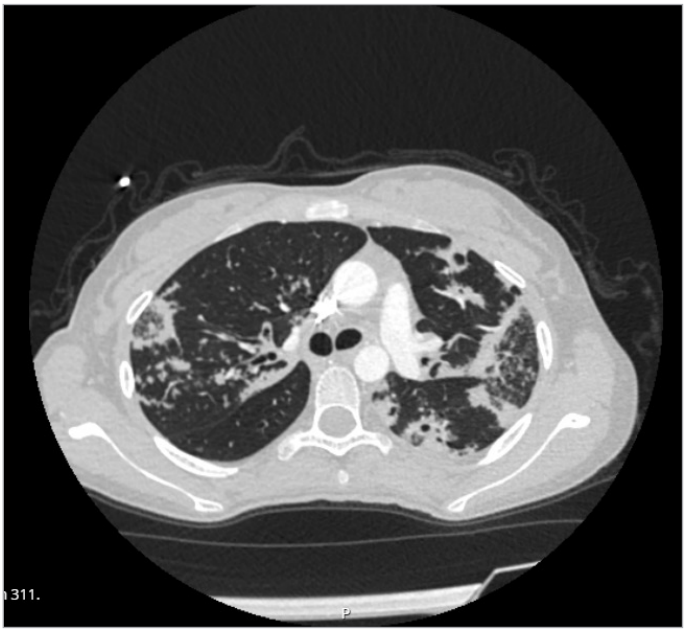

Figure 4. CT scan-3.

[Abstract:2299]

SUBDURAL EMPYEMA: THE NEED FOR AN EARLY RECOGNITION AND TREATMENT AND MULTIDISCIPLINARY MANAGEMENT

Sofía Del Barrio Rey[1], *Fernando Jiménez Segovia*[1], *Marina López Rubio*[1], *Olaya Huergo Fernández*[1], *Marta Olimpia Lago Rodríguez*[1], *Ángela Dornas Núñez*[1], *Gracia Villareal Paúl*[1], *Tatiana Pire García*[1], *Chiara Fanciulli*[2], *Cristina Díez Romero*[2], *Francisco Tejerina Picado*[2]

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[2] Department of Microbiology and Infectious Diseases, Gregorio Marañón University Hospital, Madrid, Spain

A 60-year-old male with personal history of hypertension and diabetes, is brought to the emergency department with fever and decreased level of consciousness. Four days earlier he had been diagnosed with otitis media, initiating oral antibiotic treatment and topical antibiotic treatment. Upon arrival at the hospital, he had paresis of the left upper limb, and conjugate eye deviation to the right. Blood tests showed leukocytosis, a PCR of 454.1 mg/L, and a procalcitonine of 22.98 g/L. Cranial computed tomography showed a right hemispheric frontal subdural collection, suggestive of empyema, that conditionate intracranial hypertension and deviation of midline structures. It also showed bilateral otitis media with tegmen tympani dehiscence. The blood cultures were positive for *Streptococcus pyogenes*. Treatment with high doses of ceftriaxone and clindamycin was initiated, and a decompressive craniectomy was performed. The neurological outcome of the patient was favourable, with hearing loss as a sequel.

Clinical presentation of subdural empyema includes fever, headache, seizures, or unilateral periorbital swelling. Focal neurologic signs can be seen at the exploration. Most commonly, the infection develops as an extension from a local paranasal sinus infection, otitis media, or mastoiditis. Treatment is based on antibiotic therapy and surgical treatment, which decreases the mass effect, and allows a better penetration of antibiotics, and in some cases the identification of the responsible microorganism.

In invasive diseases due to Streptococcus pyogenes, the addition of clindamycin to a beta lactam antibiotic improves the prognosis due to the antitoxigenic effect of clindamycin.

Keywords: *subdural empyema, Streptococcus pyogenes, betalactam, clindamycin*

[Abstract:2311]

WHAT HIDES A DIGESTIVE BLEEDING

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A 71-year-old man underwent surgery a year ago for cholangiocarcinoma with complete resection. Multiple postoperative complications: reoperation for bilioperitoneum, invasive candidiasis, inguinal hematoma associated with central

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venous catheter (CVC) and multifactorial confusional syndrome in which meningoencephalitis was ruled out after lumbar puncture. He presented with melena of 48 hours of evolution, associated in recent weeks with nonsteroidal anti-inflammatory drugs (NSAIDs) for low back pain.

On arrival he was hypotensive, tachycardic, abdominal examination was unremarkable, rectal examination showed melena and laboratory tests showed anaemia. Suspecting upper gastrointestinal bleeding, fluid therapy, transfusions, intravenous omeprazole and endoscopy was performed with Forrest IIa gastric ulcer being treated. Evolution was favourable but lumbar and left hip pain persisted. A PET-CT scan showed L3-L4 intervertebral hypermetabolism in relation to spondylodiscitis and a hypermetabolic collection in the left iliac muscle compatible with abscess.

Blood cultures, Brucella spp serology, transthoracic echocardiogram was negative and the abscess was drained with negative culture. Three weeks later, pain worsened at hip level with elevated acute phase reactants, so the MRI was repeated, showing an increase in the iliac abscess with fistula towards the coxofemoral joint and osteoarthritis of the same. Surgical cleaning and sampling of the abscess and coxofemoral joint was performed and *Candida albicans* was isolated. It was decided to start prolonged treatment with fluconazole.

Osteoarticular Candida infections are infrequent and difficult to manage, and as in the case presented, they are usually preceded by an episode of candidemia even months before the onset of the disease.

Keywords: *digestive bleeding, spondylodiscitis, Candida*

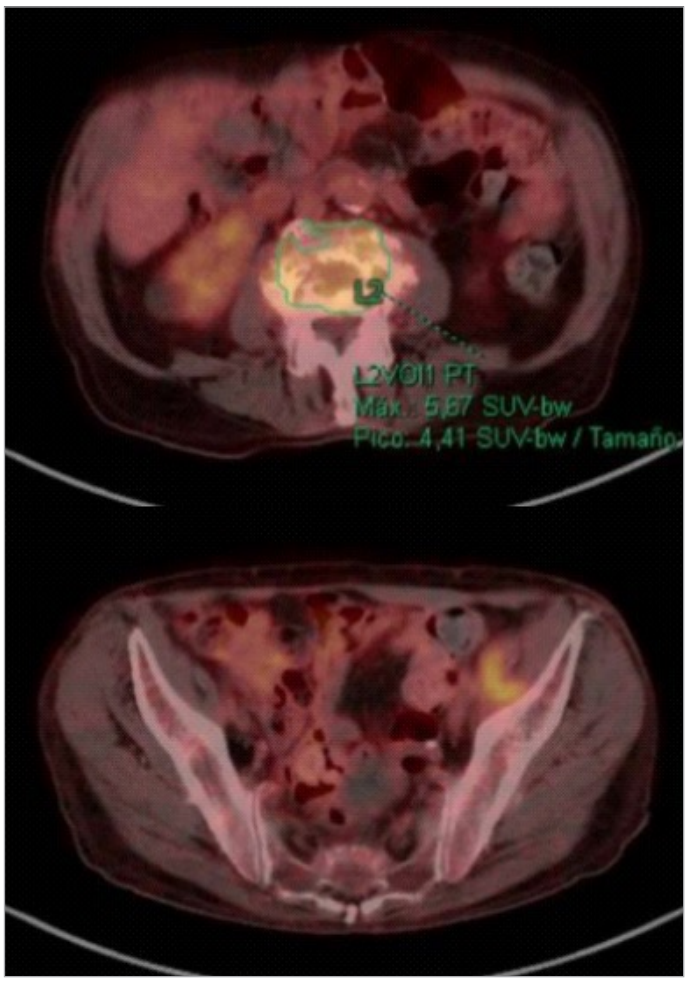

Figure 1. *Spondylodiscitis and collection in left iliac musculature with hypermetabolic borders compatible with abscess.*

[Abstract:2313]

TUBERCULOSIS: LESSONS YET TO BE LEARNED

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Tuberculosis is a multi-system infection with insidious onset that could mimic or coexist with various diseases. Such diverse clinical presentations often result in diagnostic challenges and delays. We herein present an example.

A 35-year-old male, with no medical history, presented with weight loss and painful facial papules. Physical examination revealed bilateral enlarged cervical lymph nodes and diffuse subcutaneous nodules. He had increased serum level of inflammatory markers. Tuberculin Skin test showed a phlyctenular reaction of 3 cm. Sputum testing for tuberculosis was negative. CT-TAP showed a heterogeneous spleen and liver with liver perfusion abnormalities, a partial portal vein thrombosis and multifocal renal infarctions. Investigations ruled out endocarditis, arrhythmia, thrombophilia,

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antiphospholipid syndrome, hyperhomocysteinemia and JAK2. Cryoglobulin test was positive.
Cutaneous biopsy showed granulomatous hypodermic lesions with necrosis and signs of vasculitis and thrombosis. Cervical lymph node biopsy showed epithelioid cell granuloma with necrosis.
The patient was diagnosed with cutaneous, lymph node, spleen and liver tuberculosis, complicated by cryoglobulinemia vasculitis affecting the portal vein and renal arteries.
He received 6 months of fixed-dose combination antituberculosis therapy. Within the first two months, the papules, nodules and the swollen lymph nodes fully disappeared. Within 6 months, CT showed repermeabilization of the portal vein and disappearance of the renal infarctions. Cryoglobulin test became negative.
In conclusion, tuberculosis is a multifaceted disease that could potentially cause vasculitis, notably mixed cryoglobulinemia which may disappear after appropriate anti-tuberculosis therapy, as it occurred in our patient. Physicians should consider tuberculosis when clinical presentation is unusual, especially in endemic countries.

Keywords: *multifocal tuberculosis, renal infarction, portal vein thrombosis, cryoglobulinemia, granulomatous hypodermic lesions with necrosis, lymphadenopathy*

[Abstract:2317]

CLINICAL HISTORY AND EPIDEMIOLOGICAL CHARACTERISTICS AS A KEY TO DIAGNOSIS: ZOONOSIS

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Case Description: A 44-year-old farmer with past history of treated hepatitis C. He consulted for 6 days of dysthermia, arthromyalgia, abdominal pain and dyspnoea. Physical examination: jaundice, 89% saturation, tachypnoea and crackles.
Clinical Hypothesis: Differential diagnosis would be made between: a) Leptospirosis b) Haemorrhagic fevers caused by Hantavirus; c) Autoimmune diseases (anti-glomerular basement membrane antibodies, granulomatosis with polyangiitis and microscopic polyangiitis).
Diagnostic Pathways: Blood test showed creatinine 5mg/dL, direct bilirubin 9.45 mg/dL, GGT 63 U/L, AST 60 U/L, ALT 73 U/L, LDH 671 U/L, haemoglobin 7.1 g/dL, platelets 47,000/µL, leucocytes 26,300/µL with left deviation, C-reactive protein 186 mg/L, procalcitonin 1.77 ng/mL, negative Coombs test. Negative polymerase chain reaction (PCR) for SARS-CoV-2. Negative urine antigens for *S. pneumoniae* and *L. pneumophila*. Peripheral blood smear: no schistocytes. Thoraco-abdominal-pelvic CT scan: multiple bilateral pulmonary consolidation foci. Bronchoalveolar lavage was performed on suspicion of alveolar haemorrhage, inconclusive. Others: No complement consumption, negative autoimmunity, negative serology for hepatotropic viruses and HIV, progressive and disproportionate elevation of direct bilirubin respect to transaminases. Positive IgM for *Leptospira* spp was obatined eventually, confirmed by urinary PCR.
Discussion and Learning Points: The importance of this case lies in: a) the search for entities that justify a complete clinical picture; b) the importance of the clinical history and the epidemiological characteristics that accompany each patient. As a result, we will obtain an index of suspicion that allows us to initiate appropriate empirical treatment and a targeted study.

Keywords: *zoonosis, jaundice, fever*

[Abstract:2320]

RAPIDLY PROGRESSIVE EBV-ASSOCIATED ENCEPHALITIS IN A YOUNG ADULT PATIENT WITH NO KNOWN DISEASE

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[2] Department of Intensive Care, Hacettepe University, Ankara, Turkey

Introduction: EBV encephalitis is clinically and radiologically nonspecific and similar to HSV-1 infection. Patients generally showed good prognosis. Rapidly progressive and fatal EBV-related encephalitis may occur in immunocompromised cases. We report rapidly progressive and fatal EBV-associated encephalitis in a young adult patient with no known disease.
Case Presentation: 26-year-old male admitted to the hospital with symptoms of upper respiratory tract infection and fever followed by loss of consciousness. The patient underwent LP and MRI Patient have increased protein in the LP, Acyclovir treatment was started with a preliminary diagnosis of encephalitis. Acyclovir treatment was discontinued on the 2nd day as the patient's clinical condition didn't improve. Pulse steroids were started with the preliminary diagnosis of autoimmune encephalitis. As the patient's consciousness worsened further, the patient was admitted to our centre. Brain CT revealed diffuse oedematous appearance in the cerebral cortex and a lesion with a heterogeneous internal structure, including hyperdense haemorrhage foci adjacent to the interhemispheric fissure in the left parietal lobe. Second LP resulted in EBV DNA (+), serum EBV serology and serum EBV DNA were negative. The autoimmune encephalitis panel sent from LP was negative. Since control BT showed uncal herniation and brain oedema, patient underwent emergency bilateral cranial decompression. Brain biopsy was performed 16th day of acyclovir treatment. EBER was negative in the brain biopsy.
Discussion: Discontinuing acyclovir and administering pulse steroids at the beginning may contribute progression of the case. Negative EBV immunohistochemistry in the biopsy suggests that it may have become negative after treatment.

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Keywords: *EBV encephalitis, acyclovir treatment, focal haemorrhage*

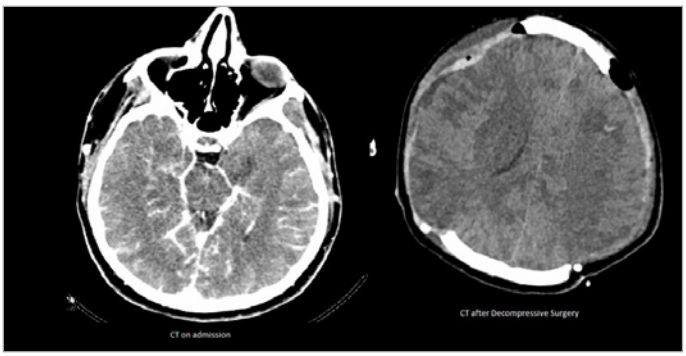

Figure 1. *Brain CT.*
Intraparenchymal bleeding center is observed in the right parietal and intraparenchymal hyperdense foci are observed at the vertex level in the right frontal, left temporal and left frontal.

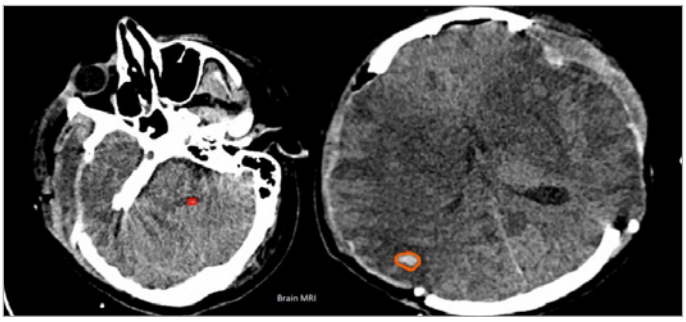

Figure 2. *Brain MRI.*
Multiple and widespread hemorrhagic lesions were observed. Cerebral cytotoxic and vasogenic edema was observed.

[Abstract:2325]

EXPLORING INFECTION PROGNOSIS IN SEVERE ACQUIRED BRAIN INJURY: CLINICAL AND LABORATORY FACTORS

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Background and Aims: Infections frequently occur in patients with disabilities resulting from severe Acquired Brain Injury (sABI). This study aims to investigate the potential correlation between vitamin D deficiency and other risk factors, examining their association with the development of Bloodstream Infections (BSIs) in a population of patients with sABI.

Methods: This observational study includes 90 patients admitted to the Intensive Neurorehabilitation Unit. Statistical analysis, including logistic regression, reveals correlations between BSIs, invasive devices, vitamin D deficiency, and other factors. A p-value<0.05 was considered significant.

Results: A logistic regression model was constructed with infection presence/absence as the dependent variable and significant variables as independents. Patient characteristics: average age 65 years; 42% female; 57% vascular-type admission; 78.8% large-calibre endovascular devices; 90% tracheostomy tube; 18% colonized by carbapenem-resistant Enterobacteriaceae (CRE) at admission.

Pressure ulcers: 56% at admission (39% I-II, 19% III-IV). Thirty-seven out of ninety patients (41%) developed BSIs during hospitalization. Variables associated with BSIs: large-calibre invasive devices and vitamin D deficiency (23.7±6.7 ng/ml). In the logistic regression model for BSIs (yes/no), lower vitamin D levels and large-calibre endovascular devices were significantly associated with a higher probability of infection (p=0.016 and p=0.004, respectively).

Conclusions: Our study reveals a correlation between the presence of invasive devices and vitamin D deficiency. Indicating an elevated risk of systemic infections. While preliminary, these findings suggest that early removal of large-calibre vascular catheters and prompt correction of vitamin D deficiency could, not only enhance survival, but also reduce hospitalization durations and alleviate disability in these patients.

Keywords: *bloodstream Infections, invasive devices, vitamin D deficiency, hospitalization durations, severe acquired brain injury, disability*

[Abstract:2330]

UNEXPLAINED HEPATITIS

Ana Cristina Peixoto, Luís Nogueira Silva, Diogo Ferreira, Clara Afonso Sanches, Helena De Oliveira, Helena Silva, Ana Catarina Alves, Jorge Almeida

Centro Hospitalar São João, Internal Medicine, Porto, Portugal

Case Description: A 37-year-old woman with a history of cholecystectomy and hospitalization in 2022 for acute hepatitis of undetermined aetiology, admitted to the Emergency Department for nausea, vomiting, diarrhoea, and right upper quadrant pain without radiation, for the past 1 day. Analytically, there was an increased pattern of cytolysis (AST 1152 U/L, ALT 496 U/L) and cholestasis (FA 100 U/L, GGT 178 U/L), hyperbilirubinemia (5.24 mg/dL) due to the indirect bilirubin (1.48 mg/dL), and elevated LDH. No history of alcohol consumption, medications, toxic products, or herbal supplements. She only consumed bottled water. No history of recent travel or risky sexual contacts. She did not have any pets. Throughout the hospitalization, remained afebrile, with favourable clinical and analytical evolution, no changes in gastrointestinal transit, and improvement in painful

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complaints. Was discharged for Internal Medicine consultation, without a clarified aetiology, to repeat autoimmune studies.

Clinical Hypothesis: Patient with recent hospitalization for acute hepatitis of undetermined aetiology, admitted for similar symptoms to the previous admission. Analytically, there was an increased cytocholestatic pattern. She was admitted for further investigation.

Diagnostic Pathways: West Haven scale: stage 0. Analytically, without appreciable hepatic dysfunction (Albumin and coagulation studies without significant alterations). Viral markers and autoimmune study negative, and abdominal ultrasound without significant alterations. Vaccination plan updated.

Discussion and Learning Points: Acute hepatitis presents with very nonspecific symptoms and is associated with numerous causes. The aetiology should be investigated to enable targeted treatment and prevent further episodes, thereby avoiding complications such as fulminant hepatitis and death.

Keywords: *hepatitis, undetermined aetiology, nonspecific symptoms*

[Abstract:2332]

TUBERCULOUS PERICARDITIS: A CASE REPORT

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Pericardial tuberculosis is a rare and severe manifestation of tuberculosis that can lead to significant morbidity and mortality if it progresses to constrictive pericarditis.

A 90-year-old man with a history of benign prostatic hyperplasia and a family history of pulmonary tuberculosis 3 years prior, presented to the emergency department with dyspnoea, lower limb oedema, and weight loss. Upon examination, there were signs of jugular engorgement, muffled heart sounds, and reduced breath sounds. Laboratory investigations showed no leukocytosis, a CRP level of 8.09 mg/dL, NT-proBNP of 1867 pg/ml, and Troponin T of 71 ng/L. A CT chest revealed bilateral pleural effusion, and thickening of the pericardium with an effusion, suggestive of pericarditis. An initial echocardiogram confirmed a large circumferential and septated pericardial effusion without hemodynamic compromise. He was empirically treated with colchicine and ibuprofen. Notable findings from the diagnostic workup included an elevated ESR, a positive IGRA, negative HIV serology. Pleural fluid analysis showing serosanguinous fluid, compatible with exudate with a normal ADA and glucose level, and negative microbiological studies. Pericardial fluid analysis revealed serosanguinous fluid with an increases ADA and LDH level, glucose of <2mg/dL, and a positive AFB stain. Bronchoalveolar lavage and bronchial secretions had negative AFB stains.

Given a significant clinical suspicion, the patient was initiated on anti-tubercular therapy and corticosteroids. The diagnosis was confirmed with the isolation of *Mycobacterium tuberculosis* in bronchial secretions, bronchoalveolar lavage and pericardial fluid. Early diagnosis and treatment of pericardial tuberculosis are essential for optimising patient prognosis.

Keywords: *tuberculosis, pericarditis, pericardial effusion*

[Abstract:2344]

DESCENDING NECROTISING MEDIASTINITIS IS STILL A MEDICAL CONDITION WITH HIGH MORTALITY?

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[2] Department of Cardio-thoracic Surgery, Evangelismos General Hospital, Athens, Greece

Descending necrotising mediastinitis (DNM) due to pharyngeal or odontogenic infection is a rare and serious infection with a high mortality rate. Early recognition and treatment are essential in order to minimise morbidity.

Between 2007 and 2020, 25 patients, aging between 17 and 63 years with DNM were submitted to surgical treatment. Orimary odontogenic abscess occurred in 11, while peritonsillar abscess in 14. Evaluation with computed tomography of the neck and chest was necessary to confirm the diagnosis and facilitating the surgical planning. Prompt empirical antibiotic therapy was implicated and all patients underwent surgical drainage of the cervico-mediastinal regions by multiple neck incisions including a collar incision associated with bilateral thoracotomy in 8 cases, right thoracotomy in 7 cases, left thoracotomy in 5 cases depending upon the extent of the disease. Bacteriologic results revealed a polymicrobial infection, with mixed aerobic and anaerobic organisms. Patients were followed according to our protocol every 4 days with computed tomography based on their clinical status.

Twenty-one patients required reoperation for surgical debridement. After a long hospitalization in the ICU and in the ward 22 patients were discharged with no relapse of the disease, while 4 patients with concomitant diseases died of multiorgan failure related to septic shock. Mortality rate reached 12%.

Early diagnosis and involvement of a multidisciplinary team as otolaryngologists, maxillofacial surgeons including thoracic surgeons, virologists and intensivists in managing these critically ill patients lead to a good outcome by reducing the mortality rate for this condition. Reoperations should not be avoided upon indication.

Keywords: *descending necrotising mediastinitis, odontogenic abscess, peritonsillar abscess, surgical drainage*

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[Abstract:2345]

SEXUALLY TRANSMITTED DISEASES AND COMPLICATIONS ASSOCIATED WITH MPOX INFECTION

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This is a retrospective study with the aim to describe in a cohort of 124 patients with mpox, concurrent sexually transmitted infections and their types, and possible complications in a tertiary hospital in Madrid during 2022. The inclusion criteria were microbiological confirmation by PCR from cutaneous lesions. We did a review of the medical history to identify complications and possible concurrent sexually transmitted diseases diagnosed after additional tests (serologies and exudates).

Regarding the observed complications, 3 patients required hospital admission. The first complication was mpox -related conjunctivitis in 1 PLHIV with undetectable viral load. The second was pneumonia related to co-infection with HPIV3 in a healthy patient. The third complication occurred in a PrEP user with dysphagia due to oropharyngeal lesions secondary to mpox infection and superinfection by *S. pyogenes*. No complications related to mpox were recorded in the remaining PLHIV. No deaths. The main documented STIs was gonorrhea. Patients with a higher number of STIs were PLHIV, despite most of them having adequate immunovirological control. A high percentage of STIs was also observed in patients taking PrEP. These findings underscore the need for systematic screening for HIV and other STIs in all patients diagnosed with Mpox. The rate of complications secondary to Mpox infection was low. This could be attributed to clade IIb, associated with lower mortality, in addition to the absence of patients with severe immunodepression in our cohort. The main observed complications were due to co-infection with other microorganisms and bacterial superinfection.

Keywords: mpox, STIs (sexual transmission infections), PLHIV (people living with HIV)

HIV primary infection	2 (1.6%)
Hepatitis B PLHIV PrEP B	2 (1.6%) 1 (50%) 1 (50%)
Hepatitis C PLHIV	1 (0.8%) 1 (100%)
Syphilis PLHIV PrEP 7	7 (5.7%) 3 (42.9%) 1 (14.3%)
Chlamydia PLHIV PrEP	13 (10.7%) 2 (15.4%) 2 (15.4%)
Gonorrhea PLHIV PrEP	17 (13.9%) 7 (41.2%) 3 (17.7%)
Mycoplasma genitalium PLHIV PrEP	11 (9%) 6 (54.5%) 1 (9.1%)
Condylomas PLHIV	7 (5.7%) 7 (100%)
Lymphogranuloma venereum 1 (0.8%) Ureaplasma urealyticum PLHIV PrEP	2 (1.6%) 1 (50%) 1 (50%)
Herpes simplex virus PrEP	1 (0.8%) 1 (100%)
Lymphogranuloma venereum	1 (0.8%)

Table 1. *Concurrent STIs in the study cohort, grouped into in patients living with HIV (PLHIV) or patients who were users of pre-exposure prophylaxis (PrEP) against HIV.*

Confirmed Mpox, n=124 (%)	1 (0.8%)
Complications	1 (0.8%)
Mpox Conjunctivitis	1 (0.8%)
Parainfluenza Virus 3 Pneumonia (coinfection)	1 (0.8%)
Acute Hepatitis A (coinfection)	1 (0.8%)
Dysphagia due to S. pyogenes coinfection	1 (0.8%)
Hospitalization	
No	121 (97.6%)
Si	3 (2.4%)
Length of In-hospital Stay (mean ± SD)	4.3 ± 0.58

Table 2. *Observed Complications.*
Results about the complications we have observed.

[Abstract:2365]

CASE REPORT – "NAVIGATING DIAGNOSTIC CHALLENGES: CYTOMEGALOVIRUS IN AN ADULT WITH ADENOSINE DEAMINASE 2 DEFICIENCY"

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Case Description: A 46-year-old woman had a history of hypertension, infant encephalopathy, delayed psychomotor development, adenosine deaminase 2 deficiency (DADA2)

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manifesting as IgM and specific antibody production deficiency, and recurrent ischemic strokes without sequelae.
She presented at the Emergency Department with fever and diarrhoea. On admission, her blood pressure was 108/64 mmHg and heart rate 124 bpm, with unremarkable physical examination. Laboratory findings revealed lymphocytosis, cholestasis with normal bilirubin, acute renal failure, and an elevated CRP of 111 mg/L. Abdominopelvic CT showed mild splenomegaly.
Empirical antibiotic therapy with ciprofloxacin and metronidazole was initiated and the patient was admitted to the hospital ward.
Clinical Hypothesis: The initial clinical hypothesis was infectious diarrhoea.
Diagnostic Pathway: Blood and stool cultures were negative, and the blood smear suggested a viral infection. Serologic tests for *Cytomegalovirus* (CMV), *Epstein-Barr* virus, *Leishmania*, *Toxoplasma* and *Strongyloides* were negative, as well as interferon-gamma release assay for tuberculosis. However, a CMV PCR was positive. Treatment with ganciclovir 2,5mg/kg/12h (adjusted for renal function) and non-specific immunoglobulins was initiated, leading to a favourable outcome.
Discussion and Learning Points: DADA2 is caused by an autosomal recessive ADA2 gene mutation, with skin rash and stroke as predominant symptoms. Anti-tumour necrosis factor serves as primary treatment. In patients with IgM deficiency, as in this case, negative serology does not exclude CMV infection, emphasizing the importance of PCR in such scenarios. This case underscores the need for a comprehensive approach and awareness of immunodeficiency-related considerations in clinical decision-making.

Keywords: *cytomegalovirus, CMV, DADA2, adenosine deaminase 2 deficiency, diarrhoea*

[Abstract:2369]

DEMOGRAPHIC PROFILE, RISK FACTORS, AND CLINICAL SPECTRUM OF MPOX INFECTION: PERSPECTIVES FROM A DESCRIPTIVE STUDY

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[2] Emergency Department, San Carlos Clinical Hospital, Madrid, Spain

Summary: The study aimed to characterize a cohort of MPOX patients and explore the relationships between the location of cutaneous lesions, symptoms, and sexual practices.
Purpose: To describe in a cohort of patients with MPOX:
- Their clinical, sociodemographic characteristics, and risk factors.
- The relationship between the location of cutaneous lesions and symptoms.
- The relationship between the location of lesions and the type of sexual practices.
Methods: Retrospective, observational, descriptive study. A cohort of 124 patients who visited the emergency department of a tertiary hospital in Madrid between May and October 2022 with a diagnosis of MPOX was included. Inclusion criterion was microbiological confirmation by PCR from cutaneous lesions. A review of the medical history was conducted to analyse clinical, epidemiological characteristics, and risk behaviours for acquiring the infection. SPSS program and the chi-square test were used to determine if there was an association between the location of lesions, the type of sexual practice, and symptoms.
Findings: (see tables).
Discussion: The majority were young individuals who have sex with men, with high prevalence of risky sexual practices. Vesiculopustular lesions were the most common symptom. Their lovation was statistically significantly associated with reported symptoms. There was a significant association between the type of sexual practice and the location of lesions (genital, anorectal). This suggests that close contact during sexual activity was the main transmission mechanism.
Conclusions: The transmission dynamics of MPOX in this cohort support the position of international organizations in recognizing MPOX infection as a sexually transmitted infection.

Keywords: *mpox, std, vesicle, msm, infectious, lesions*

Age, years (interquartile range)	35 (IQR 28-41)
Gender: - Male - Female	 - 123 (99.3%) - 1 (0.8%)
Sexual orientation: - Homosexual - Bisexual - Heterosexual	 - 121 (97.6%) - 2 (1.6%) - 1 (0.8%)
Unprotected sexual relations	111 (90.22%)
Type of sexual practice: - Insertive anal sex - Receptive anal sex - Both - Vaginal sex	 - 44 (35.5%) - 34 (27.4%) - 43 (34.7%) - 3 (2.4%)
Number of sexual partners (last 21 days): - 0 - 1-3 - 4-6 - >6	 - 4 (3.2%) - 101 (84.7%) - 16 (12.9%) - 3 (2.4%)
Recreational drug use during sexual activity	36 (29%)
Parenteral drug use	6 (4.8%)
Stay in bars or saunas with sexual intent (last 21 days)	25 (20.2%)

Table 1. *Sociodemographic Characteristics and Risk Factors n=124 (%).*
Sociodemographic characteristics and risk factors of the cohort of patients with MPOX.

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Vesiculopustular skin lesions	124 (100%)
Location of cutaneous lesions: - Face and neck - Penis - Upper or lower extremities - Anal region - Trunk (back or abdomen) - Palms and soles	 - 59 (47.6%) - 66 (53.2%) - 62 (50%) - 41 (33.1%) - 59 (47.6%) - 32 (25.8%)
Other symptoms: - Fever - Erythema - Painful lymph nodes - Headache - Odynophagia (painful swallowing) - Fatigue - Myalgias (muscle pain) - Urethritis - Proctitis - Respiratory symptoms	 - 84 (67.7%) - 19 (15.3%) - 62 (50%) - 46 (37.1%) - 41 (33.1%) - 82 (66.1%) - 61 (49.2%) - 12 (9.7%) - 34 (27.4%) - 7 (5.6%)

Table 2. *Clinical Characteristics n=124 (%).*
Clinical spectrum of the cohort of patients with diagnosed MPOX.

Lesions in the anal region 41 (33.1%):	- Proctitis 34 (27.4%) - Receptive anal sex 34 (27.4%) or versatile 43 (34.7%)	- p<0.000 - p<0.001
Lesions on the penis 66 (53.2%):	- Urethritis 12 (9.7%) - Insertive sex 44 (35.5%) or versatile 43 (34.7%)	- p<0.000 - p<0.000

Table 3. *Association between the location of lesions, symptoms, and sexual practices n=124 (%).*
The tables show the association between the location of the vesiculopustular lesions with the referred symptoms, and the association between the location of the vesiculopustular lesions with the sexual practice.

[Abstract:2371]

TOXOCARIASIS – THE IMPORTANCE OF EPIDEMIOLOGY IN THE DIFFERENTIAL DIAGNOSIS

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Toxocariasis (Tc) is a zoonotic infection caused by the nematodes *Toxocara canis* and *Toxocara cati* (dog and cat serving as their respective vectors). It is more common in developing countries. Suspicion of Tc should be based on the patient's medical history, observation and additional tests in individuals with a suspected epidemiological context.

A 24-year-old female farmer from São Tomé and Príncipe was admitted for asthenia, anorexia, and weight loss, over 8 months. She reported recurrent urinary infections and episodic abdominal pain. On examination: emaciated, non-jaundiced, with tenderness on palpation of the left iliac fossa, no palpable masses, no lymphadenopathy, no abnormalities on cardiopulmonary auscultation. Laboratory: microcytic anaemia and eosinophilia. No alterations in renal function or liver enzymes were noted. Protein electrophoresis revealed broad-based hypergammaglobulinemia without a monoclonal component. Elevated IgE levels were observed (1727.0 U/mL), along with a beta-2 microglobulin level of 2.71 mg/L. Viral serologies were negative as were serologies for Brucella, Fasciola hepatica, Strongyloides and hydatid cyst. Bacteriological and parasitological examination of faces was negative. Schistosoma search in urine was negative. IGRA (interferon-gamma release assay) was negative. Mycobacteria search in blood culture and urine was negative. Thoraco-abdominopelvic computed tomography: two lung nodules, one hepatic nodule. Due to relevant epidemiological context, a serology for Toxocara was requested: positive result. Treatment with albendazole was initiated, leading to resolution of the symptoms.

This clinical presentation of Tc, similar to other diseases, with multiple organs involvement: infectious, auto-inflammatory, neoplastic conditions, highlights the importance of clinical history and epidemiology for this diagnosis.

Keywords: *toxocariasis, toxocara, epidemiology*

[Abstract:2387]

TUBERCULOSIS AND POLYSEROSITIS, A CLINICAL CASE

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Extra-pulmonary tuberculosis occurs in about 20% of cases, with the most common forms being pleural, lymphatic, osteoarticular, genitourinary, intestinal, peritoneal, meningeal/CNS and pericardial. Diagnosis requires a high clinical suspicion as the signs and symptoms are nonspecific, often mimicking malignancy.

A 49-year-old woman with a history of significant alcohol consumption and smoking habits was admitted for weight loss and newly onset ascites. Laboratory findings included normochromic normocytic anaemia (10.9 g/dL), thrombocytosis (564 x 10^9/L platelets), increased sedimentation rate (90 mm/h), normal liver enzyme levels, elevated C-reactive protein (9.81 mg/dL). Thoraco-abdominopelvic computed tomography revealed "considerable right pleural effusion; upper left lobe with at least three cavitary lesions; normal-sized liver, homogeneous structure; large peritoneal effusion and diffuse peritoneal thickening." Paracentesis showed ascitic fluid with 850/µL nucleated cells, predominantly lymphocytes, exudate characteristics, ADA 37 U/L, negative for neoplastic cells, aerobic/anaerobic bacteria, and mycobacteria. Blood cultures for aerobes and mycobacteria were negative. Tumour markers (CEA, CA 19.9, alpha-fetoprotein, CA 125) were within reference values. Serologies for hepatitis B, C, and HIV were negative. Molecular detection of *Mycobacterium*

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tuberculosis complex in sputum was positive. The patient started quadruple therapy with antituberculosis drugs, showing clinical improvement and was discharged on the 7th day of hospitalization. This illustrates an uncommon presentation of pulmonary tuberculosis associated with pleural and peritoneal effusion. Peritoneal tuberculosis is associated with pulmonary tuberculosis in only 3.5% of cases, often mimicking malignancy. This case highlights the importance of considering this diagnosis in patients with ascites and nonspecific clinical presentation, especially in individuals with a history of alcohol abuse.

Keywords: *tuberculosis, extra-pulmonary tuberculosis, pleural effusion, peritoneal effusion, ascites*

[Abstract:2390]

UNFAVOURABLE DEVELOPMENT IN A CASE OF LEGIONELLA PNEUMONIA

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Purpose: *Legionella pneumonia* is a disease with a variable incidence, with series ranging from 2 to 30%, being the most frequent between 2%-6%, depending on the type of population; being one of the most frequent causes of severe pneumonia requiring admission to ICU. Its complications are a rare finding. One of them, organizational bronchopneumonia may appear as an idiopathic process or be secondary to other processes such as connective tissue diseases, pharmacological toxicity or as a postinfectious complication. With a specific treatment, it has a good prognosis, although recurrences are frequent when treatment is decreased.

Methods: In this study we present the clinical case of a 77-year-old woman, admitted for acute hypoxemic respiratory failure secondary to Legionella pneumonia with a good initial response to treatment, subsequently presenting unfavourable evolution, attributed to decompensated heart failure, which, being expected, only partially explained the evolution described.

Findings: Given the thoracic evolution with adequate treatment, although the patient presented semiology compatible with heart failure, chest CT was performed in which organized bronchopneumonia was found, in this case, postinfectious.

Conclusions: This case exemplifies how in the face of an evolution not congruent with the initial diagnosis, it is possible to rethink other alternative diagnoses, but also complications that although they may be less frequent, are directly related to the initial diagnosis.

Keywords: *Legionella, postinfectious organizational bronchopneumonia, BONO*

[Abstract:2394]

AUTOIMMUNE ENCEPHALITIS AS AN ATYPICAL RELAPSE FOLLOWING INFECTIOUS ENCEPHALITIS CAUSED BY HERPES SIMPLEX VIRUS TYPE-1

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An immune-mediated response against neuronal surface antigens after encephalitis due to Herpes Simplex virus type-1 (HSV-1) has been described. Often associated with immunoglobulin G (IgG) antibodies against the N-methyl-D-aspartate receptor.

A 77-year-old male with a history of alcoholism (40g/day) without cognitive impairment. Presented a 3-day headache, fever (38.9°C) and behavioural changes. Examination was normal but he was drowsy. Blood tests were unremarkable. Cerebrospinal fluid (CSF) analysis showed clear fluid, hyperproteinorrachia (57.4 mg/dL), pleocytosis 25 (94% lymphocytes) and normal glucose. Antibiotic and intravenous acyclovir treatment were initiated for suspected infectious meningitis. Brain CT (Computed-Tomography) scan showed no abnormalities. HSV-1 in CSF was positive by polymerase chain reaction (PCR). Serial electroencephalograms confirmed a right fronto-temporal focal status with good response to antiepileptic drugs. Brain MRI (Magnetic-Resonance-Imaging) showed signs of bilateral herpetic encephalitis.

After 14 days, due to persistent HSV-1 positivity (PCR) Acyclovir was continued for 7 days. At day 21, the level of consciousness declined. CSF analysis showed increased lymphocytic pleocytosis and hyperproteinorrachia, but negative HSV-1 (PCR). Onco-neuronal and surface antibodies were negative. Due to the recurrence of symptoms and the absence of HSV-1 in CSF, autoimmune encephalitis was suspected, and intravenous corticosteroid was administered, with clinical improvement. Surface antibodies were confirmed without determining a specific type in an external laboratory culture on hippocampal neurons. Patient was discharged with anterograde and retrograde amnestic syndrome and left hemiparesis.

Suspicion should arise in cases of psychiatric symptoms following initial improvement, prolonged symptoms or recurrence of initial symptoms. Early recognition of this complication is crucial due to preventable sequelae and its potential responsiveness to immunotherapy.

Keywords: *infectious encephalitis, herpes simplex virus type-1, NMDA encephalitis, corticosteroids*

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[Abstract:2399]

RARE COMPLICATION OF AMIGDALITIS IN A YOUNG PATIENT

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Lemierre's syndrome is a rare disease characterized by thrombophlebitis of the internal jugular vein secondary to an anaerobic infection in the head or neck region, complicated by sepsis and embolization of distant organs with significant morbidity and mortality.

Male, 20 years old, went to the Emergency Department (ED) with fever, a productive cough and an episode of syncope after rising. He reported odynophagia with purulent tonsillar hypertrophy 2 weeks before admission, medicated empirically with azithromycin. He was hypotensive, tachycardic, polypneic and febrile (39ºC), with an abolished vesicular murmur on the left. Laboratory tests showed leucocytosis of 21000/µL with neutrophilia, CRP 30 mg/dL, PCT 55 ng/dL. Chest X-ray well-defined hypotransparency occupying the lower ¾ of the left hemithorax. Chest CT scan loculated pneumoempyema with gaseous areas in most of the left hemithorax, with several regular peripheral nodules that were partially necrotic-abraded. Admitted respiratory infection and started empirical antibiotic, after culture tests were taken. Unfavourable evolution to septic shock with cardiovascular dysfunction and need for vasopressor support and drainage of empyema (1700 mL of purulent pleural fluid). Fusobacterium necrophorum was isolated with subsequent adjustment of antibiotic to penicillin and metronidazole, assuming Lemierre's syndrome with obstructive shock and thrombosis of the right jugular vein (documented on Doppler ultrasound).

Despite the lower frequency in the post-antibiotic era, new cases of Lemierre's syndrome continue appearing. The clinical characteristics are specific, but requires a high level of suspicion, and early diagnosis and appropriate antibiotic therapy are important to improve the prognosis, reducing the associated morbidity and mortality.

Keywords: *amygdalatis, anaerobic, antibiotic, complication, infection*

[Abstract:2408]

SEVERE ACQUIRED BRAIN INJURY IN THE TIME OF COVID-19

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Background and Aims: The Italian Healthcare System has faced an ongoing emergency due to the spread of the SARS-CoV-2 virus. This study analyses patient characteristics during two distinct periods: the early pandemic, characterized by more restrictive preventive measures, and the late pandemic, characterized by less restrictive measures. Limited Literature exists regarding the impact of the health emergency on patients with severe Acquired Brain Injury (sABI).

Methods: All patients admitted to the Intensive Neurorehabilitation Unit with a negative SARS-CoV-2 swab upon admission were included in the study during two periods: from January 1st to May 31st, 2020 (early pandemic) and from January 1st to May 31st, 2022 (late pandemic). Patients in Group 0 underwent a 7-day preventive isolation, while the Group 1 began rehabilitation immediately after admission.

Results: We analysed 27 patients during the early pandemic and 40 during the late pandemic. Comparing the groups, we did not observe statistically significant differences in age at the event (66 vs. 63), age upon admission (66 vs. 63), and days between the event and admission (36 vs. 42). In both groups, the most frequent aetiology was vascular. The median length of stay was significantly higher in the first group (84 vs. 64). Mortality did not show statistical significance.

Conclusions: Our study suggests that the pandemic may not influence mortality in sABI, a result that contrasts with mortality data reported in the Literature for hospitalized patients. We are certain that additional data are necessary, but even this limited study raises many points for reflection.

Keywords: *severe acquired brain injury, SARS-CoV-2, COVID-19, infection, mortality*

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[Abstract:2442]

SEPTIC EMBOLISM IN A PATIENT WITH RESPIRATORY INFECTION DUE TO INFLUENZA A

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An 82-year-old woman with a history of hypertension, type 2 DM and infiltrating ductal carcinoma on maintenance treatment.
She came to the emergency department for cough, increased oedema in the lower limbs and progressive dyspnoea of one week's evolution. No other associated symptoms.
The patient had a BP of 135/80, Fc 80lpm, saturation of 97% with nasal goggles at 2 bpm and afebrile, with slight tachypnoea on speaking. He had bilateral rhonchi and wheezing on auscultation, as well as bibasal crackles and MMII with oedema up to the knee.
A blood test showed haemoglobin 10 g/gl, glycaemia 335 mg/dl, proBNP 4500 pg/ml and CRP 85. A chest X-ray showed bilateral costophrenic sinus impingement, fluid in the fissure and bilateral alveolointerstitial infiltrate and a nasopharyngeal exudate with a diagnosis of influenza A, with all other respiratory viruses negative.
With a diagnosis of influenza A infection and congestive heart failure, a transthoracic ultrasound was performed with preserved ejection fraction and moderate mitral insufficiency, and treatment was started for heart failure with progressive response of the respiratory symptoms.
During admission, the patient reported cervical pain with the appearance of an indurated lump in the left clavicular fossa. A CT scan showed metastasis in the left sternoclavicular joint, so a biopsy was performed where Enterococcus faecalis was isolated with no evidence of oncological disease. Antibiotic treatment was started and a blood culture was performed where Enterococcus faecalis also grew.
With the suspicion of endocarditis, a transesophageal echocardiography was requested and the diagnosis was confirmed.

Keywords: *endocarditis, heart failure, influenza A*

[Abstract:2455]

PULMONARY CAVITY IN A COVID-19 PNEUMONIA PATIENT. WHAT IS IT ABOUT ?

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An 85-year-old male with multiple comorbidities, including diabetes, was admitted in April 2021 to the Infectious Diseases Department due to bilateral pneumonia caused by COVID-19 and acute hypoxemic respiratory failure requiring low-flow oxygen with a significant elevation in inflammatory parameters. Treatment with dexamethasone 6 mg was initiated, despite this, there was progressive worsening, necessitating escalation of oxygen therapy and maintaining high doses of corticosteroids (20 mg of dexemethasone) for 15 days. Due to multiple comorbidities, invasive measures were not an option, so the patient underwent pulmonary radiotherapy, resulting in a positive response and reduced oxygen requirements.
Subsequently, the patient experienced hemoptysis, prompting a chest CT scan that revealed a newly appeared cavitary nodule in the right upper lobe. Rhizopus was isolated from a respiratory sample, leading to the initiation of antifungal treatment with liposomal Amphotericin B, later switched to isavuconazole due to worsening renal function.
A follow-up chest CT showed significant growth of the lesion. Lobectomy was not considered feasible, so the medical treatment was optimized, expanding antibiotic coverage and employing dual antifungal therapy with intravenous Amphotericin B in addition to inhaled therapy and oral isavuconazole. Partial clinical and radiological improvement was observed until a massive hemoptysis episode necessitated bronchial artery embolization. Following the procedure, renal function deteriorated with anuria and eventually passed away.
With this clinical case, we aim to highlight the importance of using corticosteroids at recommended doses, avoiding indiscriminate use at very high doses and for extended periods to mitigate the risk of infections and related adverse effects.

Keywords: *Mucormycosis disease, COVID-19, high doses of corticosteroids*

[Abstract:2463]

A DIFFERENT PRESENTATION OF AN INFECTIOUS DISEASE

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This case presents a clinical study of a 45-year-old man who presented to the emergency room with headaches, night sweats, a persistent cough, and pain in the right upper thorax persisting for the last two months. The patient worked in Ecuador as a cow leather tanner. He sought medical assistance there, where he was prescribed antibiotics and bronchodilators. However, these medications provided no relief. He underwent a series of tests, including chest and abdominal CT scans, which revealed nodules in the lungs, liver, and lytic lesions along the lumbar column and iliac crest, all consistent with secondary lesions.
For the purpose of identifying the primary lesion upon more detailed scans, the liver nodules were identified as haemangiomas.

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A biopsy of the L5 bone revealed tissue consistent with haemangiomas. The lung nodules were not biopsied due to their size and will remain under observation.
At this stage, no specific treatment was prescribed, apart from pain management medication, as none of the lesions were indicative of neoplastic growth. Due to his profession, it led us to consider the possibility of an endemic infection.
Due to the patient's persistent cough, a bronchoscopy was performed to obtain biopsy samples from lung tissue and cultures from bronchoalveolar lavage which were positive for a fungal growth - *Herpotrichia* sp.
This infection is rare in humans and there are no symptoms associated with it. Since the patient shows no signs of disease and new PET scans didn't reveal any growth activity, no treatment was initiated.

Keywords: *infectious, endemic, neoplastic*

[Abstract:2473]

A PATIENT WITH CEREBRAL RING-ENHANCING LESION AND PAINLESS GENITAL ULCERS: DEALING WITH AIDS MANIFESTATIONS

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Background: Opportunistic infections comprise a major cause of mortality in patients with AIDS. Considering serology limitations, imaging studies play a crucial synergistic role in prompt diagnosis. We present an interesting case of neurotoxoplasmosis along with atypical herpes co-infection in an HIV patient.
Case Presentation: A 46-year-old Cameroonian woman staying in a refugee-camp, presented with persistent vomiting, intense headache, confusion and fever. She reported an 8-year medical history of HIV infection and having stopped antiretroviral therapy 1.5 years ago. Head CT-scan demonstrated a single parieto-temporal ring-enhancing lesion with extensive oedema. Blood chemistry revealed mild eosinophilia and positive anti-toxoplasma IgG. Further examination showed atypical painless genital ulcers with pruritus and lower extremities neuralgia. At presentation her CD4 count was 3 c/μL and her viral load $2.28x10^5$ copies/ml. She was started on cotrimoxazole and dexamethasone for cerebral toxoplasmosis. Magnetic Resonance Spectroscopy verified the diagnosis whereas new laboratory investigation detected anti-toxoplasma IgM. Serology testing for syphilis, HSV, VZV, EBV and CMV was negative, although the genital ulcers were aggravated while treated with antifungals. Skin biopsy reported a non-CMV herpes infection which responded to valacyclovir. Follow-up head CT depicted significant improvement whereas chest CT revealed a subclinical pulmonary embolism despite enoxaparin prophylaxis. Proper anticoagulant and antiretroviral therapy were initiated with subsequent clinical improvement of all symptoms.
Discussion: Clinical syndromes present atypically in HIV patients whereas conventional thought processes and diagnostic methods may be inadequate or misleading. A combination of demographics, diagnostics, therapeutic criteria and recognition of atypical manifestations is vital.

Keywords: *AIDS, HIV, ring-enhancing lesion, toxoplasmosis, painless genital ulcers*

[Abstract:2482]

CASE REPORT OF SEVERE P. FALCIPARUM MALARIA IN GREECE

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A 50-year-old male, with a recent travel history in Angola, was admitted to the hospital due to dyspnoea and fever with chills. He had not received chemoprophylaxis for malaria. In the ER, he was febrile (39.2°C) and hemodynamically unstable. The clinical examination was without significant findings, except palpable splenomegaly. The lab results showed increased inflammatory markers, thrombocytopenia, increased liver enzymes and positive d-dimers.
The patient was admitted to the Internal Medicine department, where he was treated with intravenous antibiotics and vasoconstrictors, due to non-response to aggressive hydration with crystalloids. The differential diagnosis included travel-related infections, including malaria.
On further investigation, full-body CTs showed no significant findings except splenomegaly (16 cm). Blood, urine, CSF and stool cultures were negative. A thick blood smear was diagnostic of ring-form trophozoites and acole forms indicative of *P. falciparum* parasitaemia. Hence, the diagnosis of malaria was made. The NPHO was contacted. Due to hemodynamic instability, the case was categorized as severe, and the patient was transferred to the ICU. He received IV artesunic acid. After completion of treatment, vasoconstrictors were withdrawn, and oral treatment was started with ACT (artemether, lumefantrine) and clindamycin. He was transferred back to the clinic, where he received a total of 24 tbs of artemether, lumefantrine, completing the 3-day regimen.
Prompt diagnosis is important in severe cases of malaria, such as cases of P. Falciparum.

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The geographical distribution must be known in order for the disease to be considered in the differential diagnosis of febrile patients.

Keywords: *severe malaria, P. falciparum, thick smear*

[Abstract:2494]

SPLENIC INFRACT: A RARE COMPLICATION IN XDR ENTERIC FEVER

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Enteric fever is a commonly occurring systemic infection characterised by high grade fever and varying gastrointestinal symptoms. Multiple complications can be observed. However, splenic involvement in the form of abscesses, thrombosis or infarcts is extremely rare.

We report an infrequent complication of splenic infarct in a young female who presented with non-resolving abdominal pain and fever. On workup, her blood cultures showed the growth of extensively drug resistant *Salmonella typhi*. Persistent abdominal pain warranted further imaging (CT abdomen) which showed multiple splenic infarcts. Initiation of appropriate antibiotics resulted in eventual resolution of her symptoms.

This case emphasises the importance of timely diagnosis with relevant investigations for effective management of an unusual presentation of enteric fever.

Keywords: *enteric fever, splenic infarct, rare complication*

[Abstract:2504]

COMPLICATIONS IN HIV PATIENTS: IT IS NOT ALL ABOUT INFECTIONS

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A 54-year-old woman from Morocco, living in Spain for two years, visited the emergency department with symptoms of fever, cough, and general malaise that had persisted for several months. She was admitted for further investigation and was finally diagnosed with advanced HIV infection, with a low CD4 lymphocyte count indicating severe immunosuppression. Additionally, she was found to have pulmonary tuberculosis, confirmed by fibrobronchoscopy and CT scan, which revealed a cavity in the right upper lobe of her lung, as well as lymph node tuberculosis and oesophageal candidiasis. The patient was treated with antiretroviral therapy, corticosteroids to mitigate immune reconstitution syndrome, quadruple anti-tuberculosis treatment and antifungals. The patient responded well to treatment and was discharged without any symptoms.

Twenty days later, the patient was admitted to the hospital again due to persistent fever and abdominal pain. A follow-up CT scan revealed a decrease in the size of abdominal adenopathies, but an increase in the cavitated lung mass, which now had a larger solid component. The possibility of neoplastic origin could not be ruled out, so further tests were conducted, revealing a new lesion in the left sacral wing and in the liver of uncertain cause (metastasis or abscess). After weeks of treatment with high-dose corticosteroids, the patient's fever and pain disappeared completely, leading to her discharge. Currently, she is waiting for a lung biopsy to determine if the mass is malignant. The clinical diagnosis at discharge was a short-lasting febrile syndrome of unknown source, possibly a tumour or immune reconstitution syndrome.

Keywords: *human immunodeficiency virus, tuberculosis, febrile syndrome*

[Abstract:2516]

CLINICAL REVIEW OF THE USE OF LIPOSOMAL AMPHOTERICIN B IN PATIENTS WITH LEISHMANIASIS IN A THIRD-LEVEL HOSPITAL

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The aim of this study is to analyse the use of liposomal amphotericin B in patients diagnosed with leishmaniasis in a tertiary hospital from January 2018 to January 2023.

This is a descriptive, observational and retrospective study that includes all patients diagnosed with leishmaniasis in our hospital for 5 years.

A total of 5 patients, all male, with a median age of 61 years (IQR 53-68), were included. Four patients (80%), all immunocompromised, developed visceral leishmaniasis, one also a cutaneous disease, and one patient (20%), immunocompetent, developed lymph node infection. The daily dose of liposomal amphotericin B was 4.0 mg/kg for all patients with visceral leishmaniasis and 2.4 mg/kg for the patient with lymph node leishmaniasis. The mean cumulative dose in patients with visceral disease was 30.3 ± 8.2 mg/kg during admission, while two patients received prophylactic extra doses after discharge, receiving 8 mg/kg and 20 mg/kg (4 mg/kg every 3 weeks). The patient with nodal infection received a cumulative dose of 16.8 mg/kg.

The recovery rate was 80%. One patient with visceral infection was non-responder. Two patients (40%) experienced renal toxicity, with a maximal reduction in renal clearance of 47.3% and 81.0%.

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After treatment ending, both values returned to normal. The only patient with underlying renal impairment did not develop renal toxicity. One patient (20%) developed skin toxicity.
The use of liposomal amphotericin B in patients diagnosed with leishmaniasis is a suitable therapeutic option, while the cumulative dose of drug received by patients varied. Renal toxicity was reversible and ceased after discontinuation of treatment.

Keywords: *immunosuppressed, infection, renal toxicity*

[Abstract:2531]

EXPERIENCE WITH DALBAVANCIN IN CLINICAL PRACTICE

Maddalena Elena Urbano, Juncal Pérez Somarriba Moreno, Rocio Manzano Lorenzo, Francisco Braojos Sánchez, Santiago Fernandez Castelao, Miguel Villar Martinez, Julia Barrado Cuchillo, Pablo Perez Mateos, Marcos Fragiel Saavedra, Carolina Olmos Mata, Maria Jose Nuñez Orantos, Rosario Iguarán Bermudez, Vicente Estrada Perez

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The study retrospectively describes Dalbavancin's use as consolidation therapy in 27 patients from a Madrid tertiary hospital, focusing on osteoarticular, endovascular, and endocarditis infections treated between January '22 and May '23. A review of medical records was performed to identify the type of infection, isolated microorganism, treatment regimen, and any eventual failures, defined as either uncontrolled infection or isolation of the same microorganism after treatment.
Patient data highlighted 44.4% female and 55.6% male with a median age of 65, showcasing prevalent comorbidities like hypertension (55.6%) and type 2 diabetes (29.6%). Osteoarticular infections were most common (25.9%), followed by endocarditis (22.2%) and bacteraemia (15.5%). *Staphylococcus epidermidis* OXA-R predominated among isolates. Therapeutic regimens showed great variability. In most cases, dalbavancin was used as consolidation therapy after at least 2 weeks of intravenous treatment. In cases of bacteraemia, a single dose of 1500 mg dalbavancin was used, while the most used regimen in endocarditis was 500 mg weekly. In osteoarticular infections, doses of 1500 mg biweekly were more frequently used. No treatment failures were observed.
Dalbavancin, a lipoglycopeptide with extended half-life, approved for acute skin infections, showed limited evidence in deeper infections due to trial scarcity and dosing diversity. Our study also observed this heterogeneity. Despite inconclusive results, no treatment failures suggest its efficacy and safety for Gram-positive infections, especially beneficial for extended treatments. Nevertheless, for off-label indications, monitoring level studies are necessary in order to standardize future guidelines in other clinical scenarios.

Keywords: *dalbavancin, infectious disease, off-label indications*

Epidemiological Characteristics	n (%) 27 (100)
Sex	Female 12 (44.4%) Male 15 (55.6%)
Median Age	65
Type 2 Diabetes Mellitus (DM II)	8 (29.6)
Hypertension (HTA)	15 (55.6)
Dyslipidaemia	8 (29.6)
Chronic Kidney Disease (CKD)	2 (7.4)
Cardiovascular Disease	9 (33.3)
Chronic Obstructive Pulmonary Disease (COPD)	6 (22.2)
Oncological Disease	4 (14.8)

Table 1. *Epidemiological Characteristics.*

Infection	N (%)	MSSA	MRSA	S.Epidermidis OXA-S	S.Epidermidis OXA-R	Enterococcus	Other	Not Specified
Osteoarticular	7(25.9%)	1	1		5			
Endovascular	2(7.4%)				1	1(Faecalis)		
Endocarditis	6(22.2%)	1		2	1	1(Faecalis + Faecium)		1
Bacteraemia	5(18.5%)	2	1		1		1(S.Hominis OXA-R)	
Skin and Soft Tissue	5(18.5%)			1	1	1(Faecalis y Raffinosus)	1(S.Haemolyticus OXA-R)	1
Others	2 (7.4%)			1				1

Table 2. *Infection Type and Isolated Microorganism.*

[Abstract:2540]

FEVER IN THE RETURNED TRAVELER - A DIAGNOSTIC CHALLENGE

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Approach to fever in the returned travellers is a challenge. Malaria is an important cause of fever and serious illness in returned travellers, especially in endemic regions. Although Cuba is not an endemic region for Malaria and Dengue, border countries are high risk areas for these diseases.
47-year-old female, without relevant medical history, returned from Cuba 2 days ago after a 20-day trip, was admitted to the emergency room with 4-day evolution of symptoms of fever, headache, myalgia, nausea, dry cough, abdominal pain and diarrhoea.
On admission, patient was hemodynamically stable, there were signs of mosquito bites in the lower limbs and a rash in the trunk. Laboratory: leukopenia (2000 cells/µL) and thrombocytopenia (60000 cells/µL), AST 275 U/L; ALT 189 U/L; GGT 358 U/L; alkaline phosphatase 155 U/L, LDH 300 U/L; C-reactive protein 37.6 mg/L. PCR for respiratory virus, blood cultures and three sets of smear blood test were negative.
Viral causes of hepatitis were excluded. The chest radiograph was normal. Abdominal ultrasonography showed hepatomegaly. Empiric antibiotherapy was initiated with azithromycin on suspicion of typhoid fever.
RT-PCR for dengue was positive. With supportive therapy, the patient was asymptomatic and liver enzymes levels decreased.
Dengue is a febrile illness transmitted by mosquitos. Infection may be asymptomatic or present with a broad range of clinical manifestations including a mild febrile illness to a shock syndrome. In the presence of fever in the returning traveller, differential

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diagnoses should include a wide range of tropical diseases, even in non-endemic areas.

Keywords: *malaria, dengue, returned traveler*

[Abstract:2558]

MUCORMYCOSIS IN AN ELDERLY PATIENT: UNRAVELING KEY CLINICAL INDICATORS FOR TIMELY INTERVENTION

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Introduction: Rhino-orbito-cerebral infection is a rare but serious condition that occurs more frequently in immunocompromised patients, especially those with poorly controlled diabetes. It is important to suspect and know how to diagnose it because timely treatment can be crucial in preventing a poor prognosis.

Objectives: Through this case report, our purpose is to characterize the risk factors and clinical features that raise suspicion for mucormycosis.

Methods: We rely on a clinical case from a hospital in Madrid, presenting a case report.

Case Presentation: 85-year-old male patient admitted due to long-term poorly controlled diabetes, and signs of infection. Initially diagnosed as a urinary infection, empirical ceftriaxone treatment was initiated, along with caspofungin due to the growth of azole-resistant Candida in urine culture. With uncontrolled infection, proptosis progressively appeared, revealing a retroorbital abscess. A biopsy confirmed rhino-orbito-cerebral mucormycosis. We discuss points to consider to facilitate clinical suspicion, allowing early diagnosis and treatment, thus improving outcome.

Conclusions: In summary, this clinical case provides an overview of the diagnostic process for rhino-cerebral mucormycosis, offering key clinical data that raise suspicion and emphasizing the importance of biopsy for histological diagnosis. We highlight that early diagnosis, when the infection is localized, increases the chances of cure. Therefore, it is crucial to consider mucormycosis in the differential diagnosis of patients with risk factors such as poorly controlled diabetes.

References:

1.- Acosta-Spain JD, Voigt K. Mini review: Risk assessment, clinical manifestation, prediction, and prognosis of mucormycosis: Implications for pathogen- and human-derived biomarkers. Front Microbiol [Internet]. 2022;13.

Keywords: *case report, hyperglycaemia, mucormycosis*

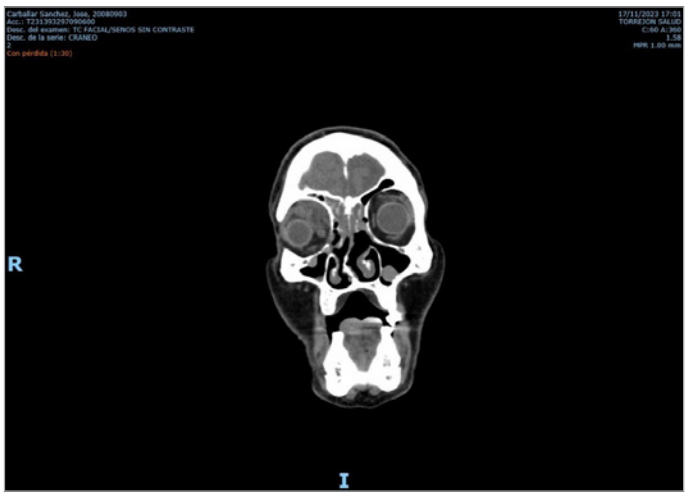

Figure 1. *Coronal CT scan.*
We can see frontal sinus and orbite's affection.

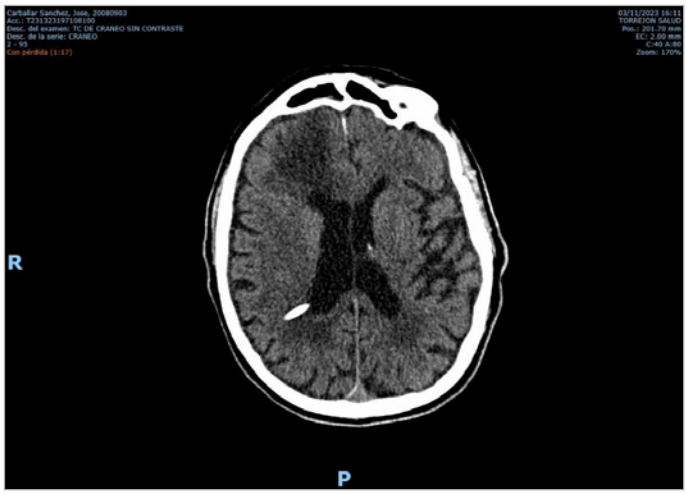

Figure 2. *Ischemia frontal lobe - TAC.*

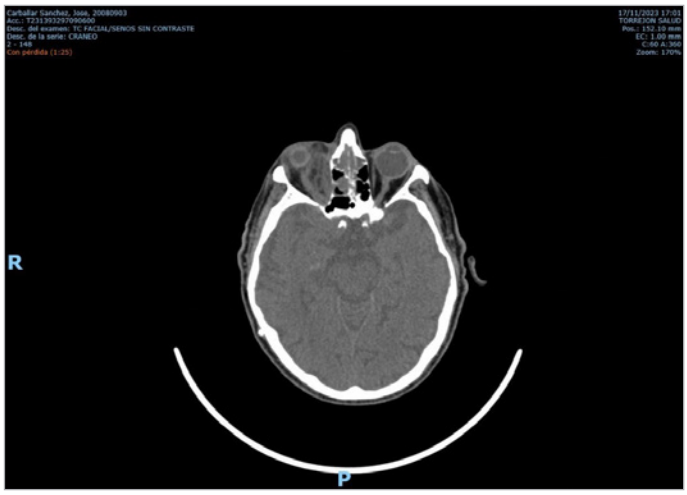

Figure 3. *CT.*
We can see the differences between the affected orbits and the other one.

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[Abstract:2576]

EYES ARE THE WINDOW TO THE SOUL

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We present the case of a 54-year-old male patient who presented to the emergency room with right eye vision loss and fever, without other symptoms. With the ophthalmological examination the patient was diagnosed with endophthalmitis (figure 1), in the absence of a history of trauma an endogenous origin was suspected, and the patient was admitted to the internal medicine ward. Intravitreal and systemic antibiotic therapy was started.

Blood tests showed an unknown diabetes mellitus with a 15.4% glycated haemoglobin and abnormal inflammation markers. A thoracoabdominopelvic CT scan was performed showing lung, liver and kidney abscesses (figure 2). Endocarditis was ruled out. During his admission he underwent complications such as pleural empyema.

Finally blood cultures were positive for *Klebsiella pneumoniae*, and a diagnosis of Cryptogenic invasive *Klebsiella pneumoniae* liver abscess syndrome (CIKPLA) was performed. After antibiotic treatment, the patient showed clinical improvement, however, visual acuity was not recovered due to vitreous fibrosis. In the control CT scan the abscesses resolved.

Klebsiella pneumoniae is an anaerobic gram-negative bacillus responsible for diverse community-acquired infections. CIKPLA is a rare syndrome that occurs in immunosuppressed patients, as is our case. It is characterized by the presence of a primary liver abscess without hepatobiliary anomaly and with secondary seeding. It has been described in *Klebsiella pneumoniae* with K1 and K2 capsular polysaccharide serotypes. The most common infectious complication is endophthalmitis, with poor visual prognosis.

Keywords: *Klebsiella pneumoniae, endophthalmitis, diabetes mellitus*

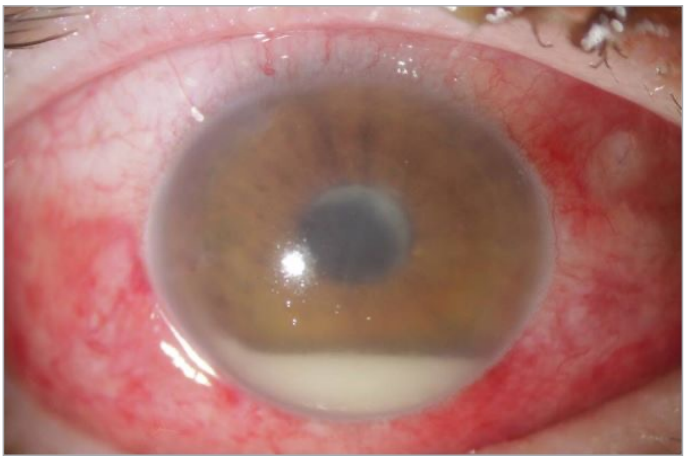

Figure 1.

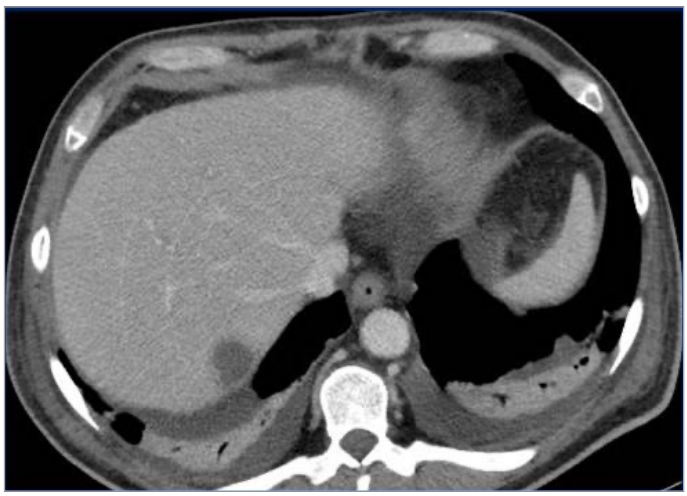

Figure 2.

[Abstract:2579]

CELLULITIS ADMISSIONS RECORD IN THE INTERNAL MEDICINE SERVICE

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Objectives: To identify the profile of patients admitted with a diagnosis of cellulitis in the Internal Medicine Department, as well as to identify the factors that predispose to this type of infection to prevent recurrences.

Methods: Observational, descriptive, retrospective study. The data were obtained from the electronic medical records of patients admitted for cellulitis in Internal Medicine in a second level hospital between January 1 and December 31, 2022.

Results: A total of 49 admissions with the main diagnosis of cellulitis were recorded. The age of the patients ranged from 28 to 102 years of age (median 83) with a clear concentration of cases over 60 years of age (80%). Most of the patients admitted during the study period were women (63.3%).

With respect to the areas affected, two stand out above the rest: the left lower extremity (38.8%) and the right lower extremity (32.7%), followed by the right upper extremity and both lower extremities, both with 10.2%.

In a significant number of cases, there was no recorded door of entry (46.93%). Finally, it should be noted that one of the cases was an opportunity for early diagnosis of Human Immunodeficiency Virus (HIV) infection.

Conclusions: The most frequent profile of the patient admitted is that of an elderly woman with pressure ulcers in the lower extremities. It is mandatory to identify and treat predisposing conditions in order to avoid recurrences. Contact with the health care system can be an unmissable opportunity for early diagnosis of HIV infection.

Keywords: *cellulitis, infections, infectious diseases*

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[Abstract:2581]

SYPHILITIC HEPATITIS - UNCOMMON PRESENTATION OF SECONDARY SYPHILIS

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Syphilis is a sexually transmitted infection induced by spirochete *Treponema pallidum*. This infectious venereal disease can involve multiple organs including the liver.

61-year-old male, admitted with bilateral leg oedema, fatigue, dry cough, odynophagia, weight loss and conjunctivitis of the right eye reported 15 days before the admission. No other symptoms were reported (fever, abdominal pain, photophobia, eye pain, visual loss, vomiting, dyspnoea, orthopnoea, diarrhoea, nasal congestion, chest pain, myalgia or headache). The patient reported high-risk behaviours for sexually transmitted diseases.

Physical examination revealed macular erythematous lesions on trunk and limbs (there were no lesions on the palms and soles), anterior cervical lymph nodes and bilateral leg oedema. Jaundice was observed. There were no signs of hepatomegaly, splenomegaly or ascites. Ophthalmic evaluation was performed, and uveitis was excluded.

Laboratory evaluation showed AST 103 U/L, ALT 84 U/L, alkaline phosphate 895 U/L, GGT 981 U/L, total bilirubin 1.16 mg/dl

Viral causes of hepatitis were excluded. Autoimmune study was normal. Abdominal ultrasonography revealed mild hepatomegaly.

According to skin lesions and risk factors, the diagnosis of secondary syphilis was considered. Venereal disease research laboratory (VDRL) test was 1/128 (positive) and anti-IgG Treponema Pallidum was 22.1 (positive), therefore syphilis was confirmed. Patient was treated with 2.4 million IU of penicillin G benzathine

Syphilitic hepatitis is an uncommon presentation of secondary syphilis. Liver damage associated with syphilis should be ruled out among patients with hepatitis of an unknown aetiology, especially in the presence of risk factors.

Keywords: *Treponema pallidum, syphilis, syphilitic hepatitis*

[Abstract:2585]

USE OF HUMAN IMMUNOGLOBULIN IN STREPTOCOCCAL TOXIC SHOCK SYNDROME IN A TERTIARY HOSPITAL

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Streptococcal toxic shock syndrome has a low estimated annual incidence (1/300,000-1/1,000,000) and a high mortality rate (30-80%) in our environment. Human immunoglobulin is used as an adjuvant therapy to support measures and antibiotic therapy. The aim of this study is to analyse the use of human immunoglobulin for this indication.

This is a descriptive, observational and retrospective study which included all patients who received human immunoglobulin as a treatment for toxic shock syndrome from 1 January 2023 to 15 April 2023 in a tertiary hospital providing care for a population of 300,000 people.

Eight patients were diagnosed, 6 were male (75%) and median age was 57 years (IQR 42-70). The aetiological agent was *Streptococcus pyogenes* group A in 7 patients (87.5%) and *Streptococcus constellatus* in 1 patient (12.5%). All isolated microorganisms were pansensitive. All patients were treated with antibiotic therapy (penicillin G 24MU) associated with antitoxin (clindamycin or linezolid) and immunoglobulins at a dose of 2 g/kg. This dose of immunoglobulins was administered as a single dose in 7 patients (87.5%). The other patient (12,5%) received 1 dose of 1 g/kg and 2 more doses of 0.5g/kg on subsequent days due to volume restriction. One patient (12.5%) died as a result of the infection.

The incidence of toxic shock syndrome has increased markedly in our environment from 1/300,000 cases per year to 8/300,000 cases in just 3.5 months. Current infections seem to respond to the treatment mentioned, with a mortality rate of 12.5%, which is moderately lower than reported previously.

Keywords: *Streptococcus pyogenes, penicillin G, septic shock*

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[Abstract:2589]

RISK FACTORS FOR MULTIDRUG RESISTANT BACTERIAL (MDRO) INFECTIONS IN A COHORT OF ADULT HOSPITALIZED PATIENTS

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Purpose: Bacterial infection is one of the most common reasons for hospitalization. Due to the excessive use of broad-spectrum antibiotics, the incidence of antibiotic resistance has increased in recent years. The purpose of this study was to discover possible risk factors for MDRO infections in a cohort of hospitalized patients.

Methods: We utilized hospitalization records of 121 patients admitted to the Internal Medicine Department of University Hospital of Ioannina, in which a bacterial infection was documented from specimens acquired upon admission. Basic comorbidities, somatometric factors and prior history were recorded upon admission. Data analysis was done using binary logistic regression on IBM SPSS Statistics 26. The odds ratios (OR) presented are adjusted for patient age and sex.

Findings: Patients' mean age was 77.7 years, while the majority (N=72) were female. MDRO infection was documented in 39 patients (32.2%). The most frequent comorbidities were arterial hypertension (N=65), dementia (N=51), diabetes mellitus (N=29) and heart failure (N=23). Patients residing in health-care homes presented a higher probability of MDRO infection (OR=2.59, p=0.038). Patients with a history of previous antibiotic exposure or hospitalization were, also, at a higher risk of developing an MDRO infection (OR=3.36, p=0.004 and OR=2.67, p=0.022 respectively). Permanent urinary catheterization significantly increased the probability of MDRO infection (OR=5.99, p<0.001). A Charlson comorbidity Index >4 was associated with a greater probability of MDRO infection (OR=2.91, p=0.074).

Conclusions: In conclusion, a sum of risk factors for MDRO infections was identified with the most important being the presence of catheters and history of hospitalizations.

Keywords: *MDR, MDRO, antibiotics, antibiotic resistance*

[Abstract:2594]

SCEDOSPORIUM RESPIRATORY INFECTION

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Scedosporium apiospermum, a ubiquitous environmental mold, is increasingly reported as causing fungal disease in immunocompromised hosts.

A seventy years old woman, chronically treated with corticosteroids for rheumatoid arthritis with associated interstitial lung disease was referred to the emergency department because of dyspnoea. After the initial evaluation she was admitted with a diagnosis of pneumonia and antibiotic therapy with piperacillin – tazobactam was initiated. After Haemophilus Influenzae biotype II was isolated from sputum and blood, therapy was adjusted to amoxicillin – clavulanate at high doses. After fourteen days of antibiotic treatment, she continued to have dyspnoea for small efforts, cough with mucous secretions, crackles and wheezing in lung auscultation and type 1 respiratory failure persisted.

Computerized tomography unspecific changes (reticular interstitial densifications on the upper lobes and bibasal segmental atelectasis). Bronchoscopy was performed and showed oedematous, friable and red bronchial mucosa. Bronchial lavage showed inflammatory changes and microbiologic studies revealed the presence of *Scedosporium apiospermum* and *Corynebacterium striatum*. After therapy with vancomycin and voriconazole was initiated, respiratory failure and respiratory symptoms resolved. Voriconazol was maintained for long term therapy.

Keywords: *Scedosporium apiospermum, fungal pneumoniae, immunocompromised*

[Abstract:2602]

A NECROTIZING ADENOPATHY

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A sixty-five year old man, with known type 2 diabetes mellitus, dyslipidaemia, arterial hypertension and benign prostatic hyperplasia with chronic prostatitis, came to the medical clinic because a necrotizing adenopathy. Four months earlier he had a week with mild fever, myalgias and asthenia that resolved with antipyretic therapy alone. At that point he felt a mass in his right armpit and went to his general practitioner to look at it. His

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doctor ordered an ultrasound that showed an adenomegaly of 32.7 mm with frankly heterogeneous and hypoechoic structure, surrounded by other enlarged lymph nodes. A cytology was ordered that only showed necrosis. Generic laboratory tests were normal. He was referred to a Pneumological Diagnostic Centre (a Portuguese entity specialized at tuberculosis diagnosis and treatment) which in turn referred the patient to our clinic.
During the interview the patient said he had no symptoms; it was ascertained that, for the last year, he had contact with a wild cat with no vaccination; he played with him many times, although he never realized to have been bitten or scratched. His physical examination was unremarkable, except for a 2 cm axillary region adenopathy with soft and elastic texture. No other palpable adenopathies were found. A PET-CT scan confirmed a solitary enlarged axillary adenopathy, with central necrosis and peripheral hypermetabolism. Serologic tests showed anti Bartonella IgG titles over 1:1024. After azithromycin for 5 days the adenopathy resolved, and the patient was discharged.

Keywords: *cat scratch disease, necrotic adenopathy, Bartonella henselae*

[Abstract:2610]

POTT'S DISEASE: TUBERCULOSIS IS NOT ALWAYS A PULMONARY INFECTION

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A 61-year-old woman from Morocco consulted the emergency department for clinical symptoms of months of evolution consisting of dorso lumbalgia, progressive motor deficit in the lower limbs and severe functional limitation with impossibility of standing and walking, without fever or other associated symptoms, and was admitted for further study. MRI and dorsal-lumbar CT scan showed spondylodiscitis in D11-12 with paravertebral abscesses and invasion of the spinal canal with severe stenosis, so CT-guided biopsy was performed, which ruled out malignancy, taking samples for microbiology with positive PCR for *Mycobacterium tuberculosis*, so Pott's disease was diagnosed and quadruple antituberculosis therapy was started. The patient was transferred to the neurosurgery department where she underwent surgery performing T6-L3 arthrodesis, T11-12 vertebrectomy with placement of an expandable box and drainage of the prevertebral abscess. As a complication, she presented infection of the surgical wound with isolation of *E. coli* and *Enterobacter aerogenes* ampC, requiring surgical cleaning and targeted antibiotic therapy with good subsequent evolution, although there was residual collection in the surgical bed, and conservative management with close follow-up was decided. At discharge, the pain and motor deficit in the lower limbs had improved, allowing ambulation, after intense rehabilitation and physiotherapy.
Tuberculous spondylodiscitis or Pott's disease is an extrapulmonary infection by *Mycobacterium tuberculosis* that affects the vertebral bodies and adjacent tissues of the spine, usually at the lower thoracic vertebral level. The predominant symptom is progressive mechanical pain, although it may present with neurological symptoms, in which case surgery should be considered.

Keywords: *tuberculosis, spondylodiscitis, abscess*

[Abstract:2632]

NEUROSYPHILIS. IMPORTANT TO KNOW IN ORDER TO BE ABLE TO DIAGNOSE. REVIEW OF CASES IN A TERTIARY HOSPITAL

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Neurosyphilis is a rare but serious manifestation of syphilis infection. Diagnosing neurosyphilis can be challenging due to its diverse clinical presentations. Accurate diagnosis is essential for timely treatment. The treatment of neurosyphilis typically involves intravenous penicillin G but in routine clinical practice, ceftriaxone is increasingly used as it is much more convenient to use. An observational study examining data from a retrospective cohort of neurosyphilis at Hospital General Universitario Gregorio Marañón (Madrid) between 2013- 2023. 12 cases of neurosyphilis were diagnosed during these 10 years period. 12 (92.3%) were male. 4 were diagnosed in the internal medicine ward, 4 in infectious diseases, 1 in nephrology, 1 in oncology, 1 in neurology, and 1 in psychiatry. 62.2 years old was the mean age at diagnosis.
Treponemal tests were positive in all cases, and nontreponemal tests were positive only in 8 (66.7%) cases. Six patients had HIV coinfection. Lumbar puncture was performed in all of them. CSF serology was positive in 10 (83.3%) patients. Two received penicillin G, 5 received penicillin followed by ceftriaxone, and 5 received ceftriaxone alone. Of the patients who received ceftriaxone alone, 4 received 14 days and one received 21 days. None were allergic to penicillin. Regarding evolution, 6 recovered completely, 3 partially, 2 had no improvement after treatment and 2 did not follow up. Neurosyphilis is a disease to be suspected, and early diagnosis is important. Ceftriaxone is increasingly used as a routine treatment, with good results.

Keywords: *neurosyphilis, ceftriaxone, Treponema pallidum*

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[Abstract:2641]

A CASE REPORT OF EPSTEIN-BARR VIRUS-INDUCED MONONUCLEOSIS WITH AMBIGUOUS SEROLOGICAL FINDINGS

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Case Presentation: Epstein-Barr Virus (EBV) is a ubiquitous herpesvirus known to cause infectious mononucleosis. This case report describes the presentation of a previously healthy 25-year-old woman, who over the past two months has experienced symptoms of profound fatigue, odynophagia, and cough. Approximately one month into the course of her illness, she developed painful cervical lymphadenopathy and fevers.

Diagnostic Pathway: Despite initially testing negative for IgM antibodies against EBV, her serological profile revealed elevated IgG levels and positive Epstein-Barr Nuclear Antigen (EBNA) antibodies. Analytically, she exhibited mild lymphopenia and thrombocytopenia. Point-of-care ultrasound (POCUS) confirmed splenomegaly and non-alarming adenopathy.

Discussion and Learning Points: As the course of the illness unfolded, the patient's fever and symptoms gradually subsided, accompanied by a reduction in adenopathy size and the normalization of laboratory parameters. This case reveals the potential discordance between clinical presentation and serology in EBV infections, emphasizing the importance of a holistic approach to diagnosis.

Keywords: *Epstein-Barr virus, mononucleosis, lymphadenopathy*

[Abstract:2650]

USE OF POST-EXPOSURE PROPHYLAXIS FOR HIV AND ITS RELATIONSHIP WITH PRE-EXPOSURE PROPHYLAXIS

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Post-Exposure Prophylaxis (PEP) for HIV involves the administration of antiretroviral drugs (ARVs) following a risky encounter, while Pre-Exposure Prophylaxis (PrEP) involves administering ARVs before such exposure. The aim of this study is to describe the characteristics of PEP prescription, its effectiveness, and quantify how many subjects could initiate PrEP.

Methods: Descriptive observational study, including subjects who were prescribed PEP between 2017 and 2022 at a Third-Level Hospital. Demographic variables, type of exposure, serologies, seroconversion, and suitability for initiating PrEP were collected.

Results: 183 PEP dispensations were analysed. 93.5% were non-occupational exposures, of which 64% were consensual sexual relations and nearly 25% were assaults. Only eleven exposures were occupational. 47% of the total posed a low risk, and 38.5% posed a minimal risk, meeting criteria for PEP dispensation 104 episodes. In most of exposures (80.4%), HIV-serology of the source was unknown, being positive in 31.

The predominant drug combination was Emtricitabine/Tenofovir Disoproxil (FTC/TDF) 200/245 mg one tablet daily and Raltegravir (RAL) 400 mg every twelve hours. During follow-up, seven different types of sexually transmitted infections (STIs) were identified. 67.2% completed the pharmacological prophylaxis, and of those, 100% remained HIV seronegative. Reported adverse reactions were mostly mild. Twenty-five patients met criteria to initiate PrEP.

Conclusions: Two out of every five PEPs prescribed at this centre do not adhere to recommendations, and nearly 15% could initiate PrEP. Knowledge about PEP prescription should be reinforced. Follow-up consultations provide an opportunity to review its indication and identify patients who could benefit from PrEP.

Keywords: *HIV, PEP, PrEP, STI, infectious diseases*

[Abstract:2661]

ABDOMINAL PAIN: A CHALLENGING DIAGNOSIS

María Navarro De La Chica, Beatriz Torres Ceballos, Jeffrey Oskar Magallanes Gamboa

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We present a 53-year-old woman who was admitted to the internal medicine service due to abdominal pain and associated weight loss. In endoscopic tests *Helicobacter pylori* was detected and treatment was started. In the thoracoabdominopelvic CT scan, mediastinal and retroperitoneal lymphadenopathys were observed, and a biopsy was performed with the result of granulomatous lymphadenitis, therefore a diagnosis of sarcoidosis was established and treatment with corticosteroids was initiated. A year later, the patient presented abdominal pain and rectal bleeding, as well as oedema in the lower limbs in the context of hypoalbuminemia due to malabsorption syndrome. Gastroscopy was repeated with an intestinal lymphangiectasia result (figure 1 and figure 2), Whipple disease was suspected and confirmed with a PCR positive test for *Tropheryma whipplei* in the gastrointestinal

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biopsies, starting treatment with cephalosporins and subsequently trimetropim-sulfamethoxazole. One week after discharge, the patient presented fever, low back pain and arthalgias and inflammation markers, with negative cultures in the context of an immune reconstitution syndrome, resolving with corticosteroids. Therefore we are faced with a case of Whipple's disease, a systemic and curable pathology caused by a gram-positive bacteria called *Tropheryma whipplei*. Gastrointestinal bleeding is a very unusual form of presentation. It is a rare disease whose diagnosis is complex, and may initially be confused with other pathologies, as it is shown in this case. Immune reconstitution inflammatory syndrome is a complication derived from the initiation of treatment and must be suspected.

Keywords: *Tropheryma whipplei*, *abdominal pain*, *gastrointestinal bleeding*

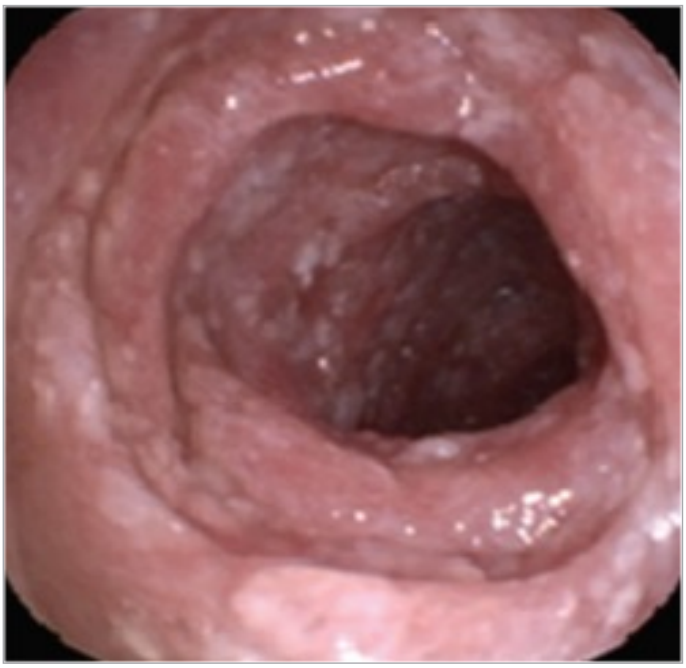

Figure 1.

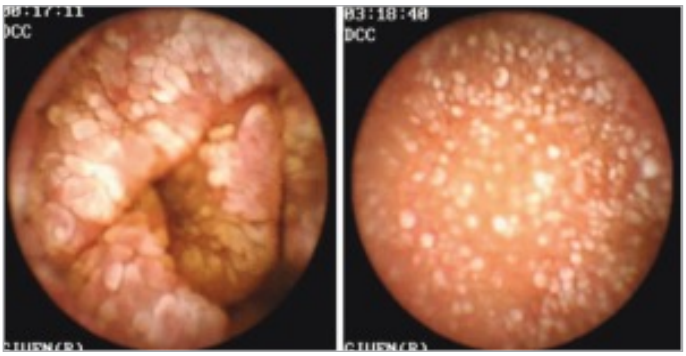

Figure 2.

[Abstract:2662]

MUCORMYCOSIS IN AN INMUNOCOMPROMISED PATIENT: A CASE REPORT

María Navarro De La Chica, Sonia Casallo Blanco, Beatriz Torres Ceballos, Jeffrey Oskar Magallanes Gamboa

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We present the case of an 82-year-old man with myelodysplastic syndrome and polymyalgia rheumatica undergoing corticosteroid treatment who began with pain and redness in the right malar region (figure 1) as well as dyspnoea, blood tests showed abnormal inflammatory markers and The chest X-ray bilateral pneumonia (figure 2). Given the respiratory infection in an immunocompromised patient, he was admitted to the internal medicine service where cultures were collected and antibiotic treatment was started without improvement, suspecting fungal aetiology. A cranial CT scan was performed with orbital cellulitis and right nasal periosteal collection. With blood cultures and skin exudates negative, a bronchoalveolar lavage culture was performed with a *Rhizomucor pusillus* isolation. Therefore, the patient presented pulmonary and probably rhinofacial mucormycosis. Despite the antifungal treatment with amphotericin B, the patient presented a poor clinical course with severe respiratory failure and subsequent death.

Mucormycosis is a serious but rare infection caused by molds. Haematological neoplasms and treatment with corticosteroids are predisposing. Rhino-facial mucomycosis evolves rapidly and can present complications as orbital invasion and brain abscess. Rapid diagnosis and suspicion is key to start treatment given its high morbidity and mortality.

Keywords: *mucormycosis*, *immunosuppression*, *myelodysplastic syndrome*

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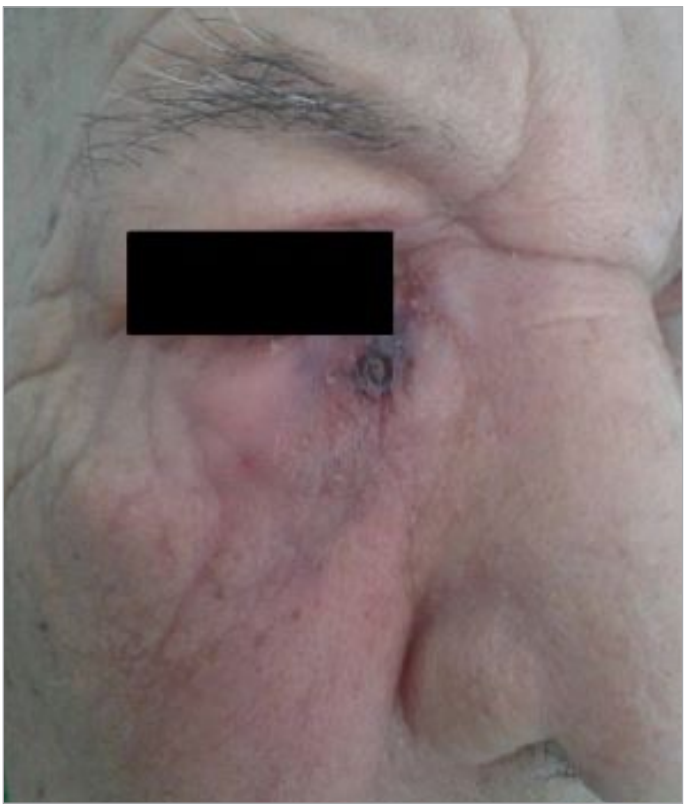

Figure 1.

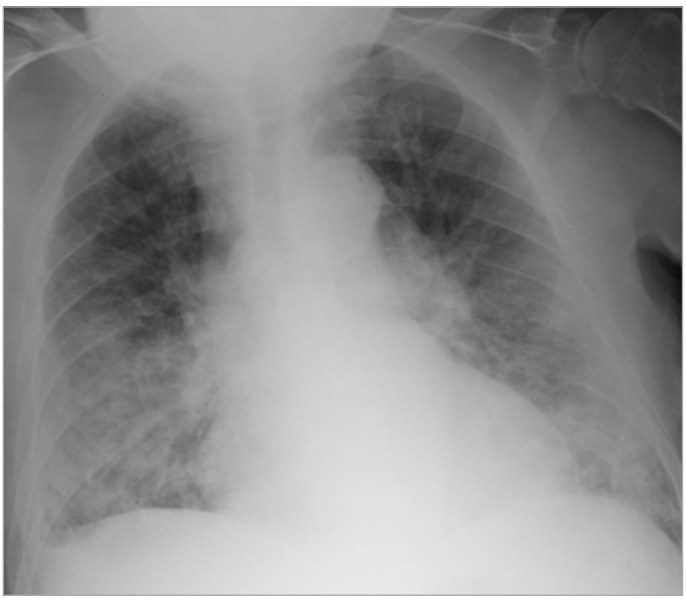

Figure 2.

[Abstract:2730]

PRIMARY HEPATIC TUBERCULOSIS MIMICKING CANCER

Hasan Basri Ergun, Yunus Can Ozalp, Aysenur Akkoyun, Esma Eren, Ayyuce Karaca, Bilal Saygin, Onur Sahin, Onur Tanrikulu, Sahende Mehves Zengin Kavurmaci, Zeliha Arslan Taskin, Hikmet Zeynep Agaoglu, Baris SURUL, mine aysan, Iffet Nesli Kirmizidemir, Ali Mert, Ufuk Suleyman Taner

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Introduction: Tuberculosis (TB) may affect the liver either as a miliary hepatic involvement or as a primary hepatic disease. Primary hepatic TB is a rare condition (<1% of all TB cases) even in endemic countries. It is mostly due to reactivation of old tuberculous foci or, rarely, a result of primary TB involvement of the liver. Because of its non-specific imaging features, it is essential to keep tuberculosis in mind as a differential diagnosis.

Case Presentation: A 48-year-old man presented with fatigue, fever, night sweats, and a weight loss of 30 kg in 6 months. He had undergone a sleeve gastrectomy one year ago. A significant weight loss happened in the last 3 months. In our clinic, the abdomen US showed multiple hypoechoic nodular lesions (≤26 mm) in the liver, whereas the contrast-enhanced abdominal CT revealed multiple hypodense lesions of the liver and intraabdominal lymphadenopathies with cystic-necrotic central segments. The results of the colonoscopy and endoscopy to look for gastrointestinal system metastasis were normal. A new PET/CT scan was performed, and it had multiple hypodense lesions in the liver, which were primarily evaluated in favour of metastasis. The patient underwent a liver biopsy, and it was consistent with necrotizing granulomatous lesions. An anti-tuberculous regimen with isoniazid, rifampicin, pyrazinamide, and ethambutol was started. The patient continues to be followed up without any problems in the 4th week of treatment.

Conclusions: Sleeve gastrectomy is a significant risk factor for TB, and it must be remembered that tuberculosis can imitate various diseases, including cancer.

Keywords: sleeve gastrectomy, tuberculosis, fever

[Abstract:2733]

STAPHYLOCOCCUS AUREUS BACTERIEMIA IN 2020 AT LEON UNIVERSITARY HOSPITAL. COMPARISON BETWEEN METHICILLIN-SENSITIVE (MSSA) AND METHICILLIN-RESISTANT (MRSA) *STAPHYLOCOCCUS AUREUS*

Clara Egea Hita, Ángela Crespo Rubio, Saray Suárez García, Alicia Calvo Romero, Javier Balaguer Germán

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Purpose: Compare clinical characteristics, risk factors and complications that differentiate methicillin-sensitive (MSSA) and

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methicillin-resistant (MRSA) *Staphylococcus aureus* bacteriemia.

Methods: Retrospective descriptive study that includes all episodes of bacteraemia caused by *Staphylococcus aureus* between January 1 and December 31, 2020, at Leon Universitary Hospital. We describe clinical characteristics, risk factors, treatment received, evolution and complications.

Results: MRSA was isolated in 24 patients (25.81%), more frequently in men and at advanced age (76.17 years, SD 16). Nosocomial acquisition was predominant in both groups (55.07% in MSSA and 54.17% in MRSA). The majority focus of MSSA bacteraemia was venous catheter (34.78% of cases), while in MRSA were both venous catheter and pulmonary infections (25% in each case). Empirical treatment was adequate in a significantly higher percentage of bacteraemia caused by MSSA compared to the MRSA group (89.86% vs. 33.3%, p=0.0005). Targeted treatment was optimal in 70.83% of patients with MRSA and in 68.21% with MSSA. We found statistically significant differences in 30-day mortality, higher in patients with MRSA infection (50% vs. 26.09% p=0.04)

Conclusions: The incidence of MRSA bacteraemia is mainly described in the nosocomial setting, it has a higher mortality compared to MSSA and the rate of inappropriate empirical treatment is high. Empirical and targeted treatments have a considerable scope for improvement.

Keywords: *Staphylococcus aureus, bacteriemia, mortality*

[Abstract:2734]

REVIEW OF CLINICAL USE OF DALBAVANVIN IN INFECTIVE ENDOCARDITIS

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Introduction: The incidence of infective endocarditis (IE) is a potentially life-threatening condition. Administering these antibiotics often requires prolonged hospital stays. Dalbavancin, due to its half-life of over 1 week, is emerging as a highly promising off-label option in the treatment of infective endocarditis.

The aim is to review the literature concerning the use and effectiveness of dalbavancin in clinical practice for treating infective endocarditis.

Materials and Methods: A PubMed literature search from January 1, 2013, to April 30, 2023. All types of studies conducted in humans in English or Spanish with full access were included.

Results: Out of a total of 25 initially examined articles, 13 were reviewed. Table 1 summarizes the most relevant data from these articles. All publications were retrospective. The overall effectiveness of dalbavancin was high, with rates ranging from 72% to 91%. No serious adverse effects necessitating dalbavancin treatment modification were described.

Discussion: Overall, high effectiveness rates are demonstrated. However, the existence of concomitant treatments, a small number of patients, or differing protocols at times might obscure the obtained results. Overall, it is a well-tolerated drug, with mild adverse reactions that do not require discontinuation. Furthermore, it allows for early discharge, avoiding events associated with prolonged hospital stays and proving to be a cost-effective medication. In conclusion, dalbavancin may be a safe and effective option for infective endocarditis. Despite encouraging results, more data on efficacy and safety from prospective studies or randomized clinical trials are necessary.

Keywords: *dalbavanvin, endocarditis, clinical use*

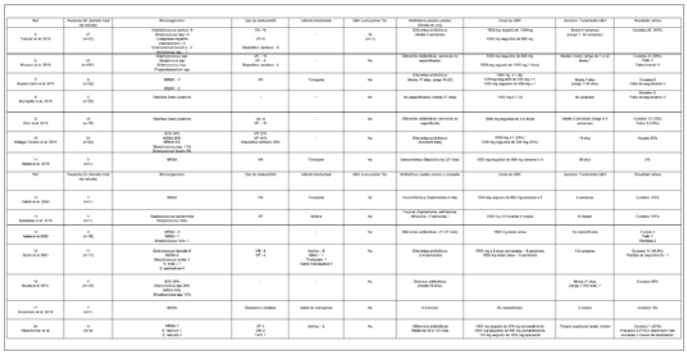

Table 1. *Estudios evaluados.*

Ref.: Referencia bibliográfica. EI: Endocarditis infecciosa. VN Válvula nativa. VP: válvula protésica. DAI: dispositivo de asistencia ventricular izquierda. TAVI: implantación válvula aóritca transcateter. MRSA: Staphylococcus aureus meticilin resistente. MSSA Staphylococcus aureus metilicin sensible. SCN Staphylococci coagulasa negativo.

** El dato de esta celda refleja el dato glboal del estudio no solo pacientes con EI.*

⚠ *The authors did not provide an English version of the table upon requests from the event organizer.*

[Abstract:2736]

STAPHYLOCOCCUS AUREUS BACTERIEMIAS IN 2020 AT LEON UNIVERSITARY HOSPITAL. COMPARISON BETWEEN KNOWN AND UNKNOWN PRIMARY FOCUS BACTERIEMIAS

Clara Egea Hita, Ángela Crespo Rubio, Saray Suárez García, Alicia Calvo Romero, Javier Balaguer Germán

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Purpose: Compare the clinical characteristics, risk factors and complications that differentiate *Staphylococcus aureus* (*S. aureus*) bacteraemia when the primary focus is known from those with an unknown focus.

Methods: Retrospective descriptive study that includes all episodes of bacteraemia caused by S. aureus between January 1 and December 31, 2020, at Leon Universitary Hospital. We describe clinical characteristics, risk factors, treatment received and complications.

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Results: *S. aureus* was isolated in blood cultures in 93 patients. The most frequent source was vascular catheter (27.96%). The primary focus was unknown in 23.66%, with a predominance in males (59.09%) and a higher mean age (78.54 years, SD 13.2 vs. 69.18 years, SD 14.7, p=0.008) compared to the known focus group. A higher percentage of persistent bacteraemia was observed when the focus was known versus unknown focus (23.94% vs. 9.09%, p=0.129). Fewer complications were detected in patients with infection of unknown source (4.55% vs. 12.68%, p=0.788). Mortality at 30 days tended to be higher in patients with unknown focus (50% in unknown focus vs. 26.76% in known focus, p=0.0699), with statistically significant differences in mortality attributable to bacteraemia in these patients (45.55% vs. 18.31%, p=0.011).

Conclusions: The proportion of cases of bacteraemia with an unknown primary focus is similar to that described in the literature, with slightly higher mortality in our study. It predominates in men and at older ages. We could not demonstrate a higher number of complicated bacteraemia in cases of unknown primary focus, but higher mortality was observed.

Keywords: *Staphylococcus aureus, bacteriemia, unknown focus*

[Abstract:2750]

STAPHYLOCOCCUS AUREUS BACTERAEMIA: DATA OBTAINED IN A TERTIARY HOSPITAL

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Introduction: The review demonstrates an increase in the incidence of bacteraemia due to *Staphylococcus aureus*. We intend to know the area of acquisition of bacteraemia due to *S. aureus*, the focus and the resistance or not to methicillin that exists in our environment.

Materials and Methods: Retrospective and descriptive study approved by the CEIm of our centre. We analysed episodes of bacteraemia due to *S. aureus* isolated between January 1 and December 31 2020.

Results: 93 patients were identified, MRSA was isolated in 24 patients (25.81%) and methicillin-sensitive (MSSA) in 69 patients (74.19%). Most of the bacteraemia were nosocomial; MRSA constituted 54.17% and in MSSA 55.07%, although in both groups there were cases of community origin and associated with health care. The main origin was the vascular catheter (27.96%) and the second the unknown focus (23.66%). Other locations were skin and soft tissues (18.28%), respiratory (16.13%), joint (5.38%), abdominal, central nervous and urinary systems (2.15% each), devices (1.08%).

Conclusions: 1. The most commonly known origin of bacteraemia is the vascular catheter.

2. The unknown origin of the focus was confirmed in almost a quarter of our patients.

3. The respiratory origin of *S. aureus* bacteraemia is common in this series, probably explained by viral coinfection with SARS CoV2.

4. MRSA infection is mainly described in the nosocomial setting.

Bibliography:

R Anantha, J Jegatheswaran, DL Pepe et al. Risk factors for mortality among patients with [Staphylococcus aureus bacteraemia: a single-centre retrospective cohort study. C Open. 2014;2(4): E352–9. DOI: 10.9778/ cmajo.20140018

Keywords: *bacteraemia, MRSA, MSSA, nosocomial, acquired in the community, health care*

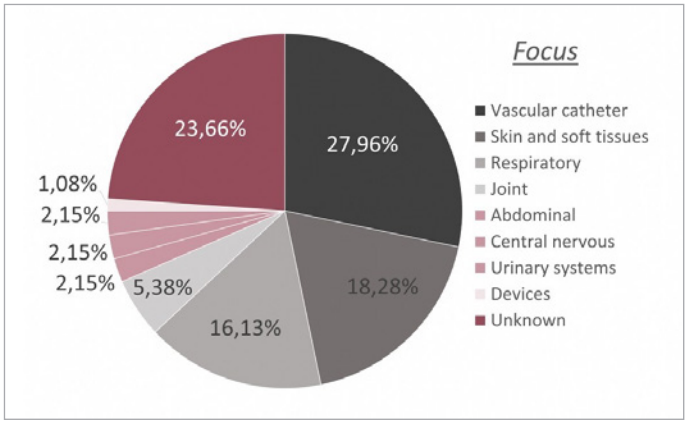

Figure 1. *Focus of bacteraemia due to S. aureus.*
The main origin of the bacteraemia was the vascular catheter in 27.96% of the cases and the focus was not determined in 23.66%. Other locations were skin and soft tissues (18.28%), respiratory (16.13%), joint (5.38%), abdominal, 0 and urinary systems (2.15% each), devices (1.08%).

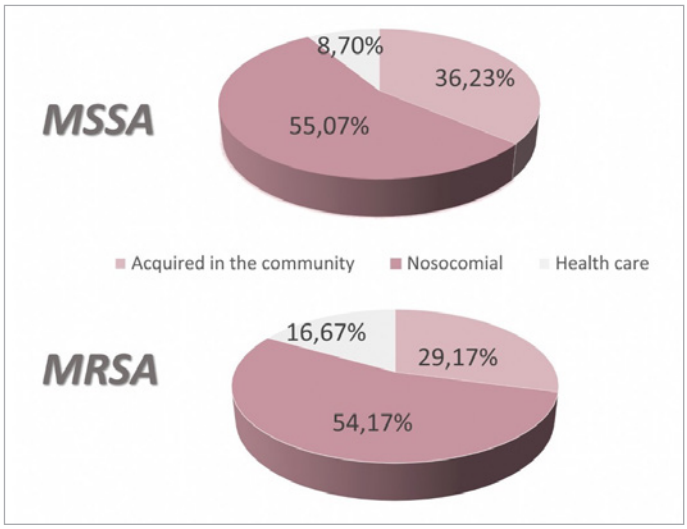

Figure 2. *Origin of MRSA and MSSA bacteraemia.*
The origin of most of the bacteraemia was nosocomial; MRSA constituted 54.17% and in MSSA 55.07%, although in both groups there were cases of community origin and associated with health care.

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[Abstract:2777]

CLINICAL AND HAEMATOLOGICAL PREDICTORS OF DENGUE HAEMORRHAGE FEVER (DHF)

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[1] Jayasekera MMPT, Samarawickrama T, Munasinghe TMJ, Wijesinghe RANK,Sheriff MHR, Department of Medicine, Faculty of Medicine, General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

[2] Edirisinghe EMDT, Aravinda LP, Dasanayake MCU, University Hospital Kotelawala Defence University, Werahara, Sri Lanka

[3] Govindapala BGDS, Department of Medicine, Faculty of Medicine, University of Sri Jayawardenapura, Sri Lanka.

Early predictors of severe dengue are crucial for the early identification and management of critical illness. Especially on the day three and four of the illness. This was aimed to identify the role of clinical features and platelet parameters as an early predictor of DHF.

Methods: A prospective observational study was conducted using patients with confirmed dengue infection admitted to University Hospital Kotelawala Defence University. DHF was defined by a 20% increase in haematocrit, along with ultrasound evidence of leaking. Chi square test was carried out to compare quantitative data between groups. Logistic regression was used to determine the predictive variables of severe illness.

Sensitivity and specificity of mean platelet volume (MPV) 3 and MPV 4 in the prediction of severe illness was calculated using the receiver operating characteristic (ROC) curves.

Findings: There were 119 and 229 patients (male 55.1 %, mean age 34.1 + 14.94 years) on day three and four of admission. Fifty-six (24.5%) progressed to DHF. Vomiting, anorexia, backache and generalised macular rash were significantly associated with DHF ($p < 0.05$). The dropping of MPV on day-three and day-four were significantly associated with DHF ($p < 0.05$).

Day three and day four of the MPV were 6.2 fL (98.7% sensitivity; 89.3% specificity) and 6.15 fL (100% sensitivity; 89.3% specificity) respectively, with a predictive progression from dengue to DHF.

Vomiting, anorexia, backache, macular rash and platelet parameter of MPV (6 fL) on days three and four appears to be a reliable predictor of dengue fever progressing to DHF.

Keywords: *Dengue haemorrhage fever, platelet indices, predictors*

[Abstract:2786]

COST-EFFECTIVENESS OF LINEZOLID THERAPEUTIC DRUG MONITORING (TDM)

Andrea María Moreno González[1], *Álvaro Corral Alaejos*[2], *Mehamed Mohamed Mehamed*[1], *Emilia Martínez Velado*[1], *Cristina Martín Gómez*[1], *Lorena Folgado Temprano*[3], *Nicolás Alberto Cruz Guerra*[4], *José Jiménez Casaus*[2]

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Aim: Analyse the therapeutic drug monitoring of linezolid used as antibiotic treatment in Gram-positive infections or in empirical treatments.

Methods: Descriptive observational study of patients administered linezolid and performed TDM from April 2023 to August 2023. Data analysed where age, sex, microbiological determination, glomerular filtration rate, haemoglobin, platelet count, number of monitoring, serum drug levels with the appropriate linezolid dose adjustment and total days of treatment.

Results: 28 patients were analysed. 50% had kidney failure. Treatment with linezolid was indicated empirically in 43%, for *E. faecium* in 36%, for *MRSA* in 11% and for others in 6.66%. The initial dose in 96% was that indicated in the technical sheet. The median treatment time was 12 days.

The first monitoring, 5 days after the start of treatment, required dose adjustment in 43% of patients. 64% of the total followed a treatment regimen of 7-10 days. In the remaining 36%, the second determination was made 10 days after the start, requiring adjustment in 70%. 18% of the patients continued treatment for more than 15 days, with a third determination being made, in which 100% required new dose adjustment.

Discussion: Monitoring linezolid levels may be useful for optimizing treatment in certain populations, depending on their characteristics and analytical parameters.

Conclusions: -Prolonged treatments with linezolid require frequent dose adjustment with respect to the standard established in the technical sheet.

-Patients with kidney failure are those who most frequently require dose adjustment.

-100% of patients with monitoring for more than 15 days required dose adjustment.

Keywords: *linezolid, levels, doses, TDM*

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[Abstract:2794]

ANALYSIS OF COMBINATION THERAPY IN *STAPHYLOCOCCUS AUREUS* BACTERAEMIA IN A TERTIARY HOSPITAL

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Department of Internal Medicine, Hospital de León, León, Spain

Staphylococcus aureus (*S. aureus*) ranks among the most frequently isolated microorganisms in community and nosocomial bacteraemia. Controversies persist regarding the efficacy of combination therapy in reducing mortality and bacteraemia duration compared to standard treatments. The aims are assess the evolution and mortality of patients who received combination therapy for *S. aureus* bacteraemia.

A retrospective observational study recorded *S. aureus* bacteraemia in 2020. Demographic, clinical, treatment and mortality data were described. The study received approval from the hospital's Clinical Research Ethics Committee.

Results: 93 patients were included, with an average age of 71.4 years (SD 14.8), predominantly male (68.82%). 65.59% had risk factors, diabetes mellitus was the most common (37.63%). Infections were community-acquired (34.41%), nosocomial (54.84%), or healthcare-associated (10.75%). Methicillin-resistant *S. aureus* (MRSA) accounted for 25.81%, while methicillin-sensitive *S. aureus* (MSSA) comprised the remaining 74.19%. Combination therapy was administered to 22.58% of patients, primarily for gap bacteraemia and clinical severity. The average duration was 15.88 days (SD 11.08). No significant differences were observed in MRSA vs. MSSA groups (p=0.5737). Complications were more frequent in the combination therapy group (33.33% vs. 4.17%, p=0.0028). There were no differences in overall 30-day mortality attributable to bacteraemia, but current mortality differed significantly (38.10% with combination therapy vs. 70.83% without, p=0.0145).

Conclusions: In this sample, combination therapy was more common in gap bacteraemia cases. Frequently used regimens were daptomycin and cloxacillin for MSSA and vancomycin and fosfomycin for MRSA. Despite treating more complex patients with combination therapy, no differences in mortality attributable to bacteraemia were found.

Keywords: *Staphylococcus aureus, S. aureus, combination therapy, bacteraemia*

[Abstract:2821]

UROGENITAL TUBERCULOSIS: A COMMON, UNDERDIAGNOSED AND POTENTIALLY ORGAN-THREATENING FORM OF EXTRA PULMONARY DISEASE

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Summary: Urogenital tuberculosis (UGTB) is the third most common form of extrapulmonary disease, accounting for 2-20% of reports. Most patients are asymptomatic, or present with non-specific symptoms and insidious onset, potentially leading to a delayed diagnosis and irreversible organ damage.

Case Presentation: A 70-year-old man was admitted with a 2-week history of dysuria and haematuria. His past history included treated bone tuberculosis at the age of 18, bladder cancer treated with transurethral resection (TUR) and Bacillus Calmette-Guérin instillation 4 years earlier, chronic kidney disease (G4A2) of unknown aetiology, and benign prostatic hyperplasia recently submitted to TUR. Laboratory tests showed increased inflammatory markers and worsened kidney function (creatinine 6.8 mg/dL); CT scan reported major bilateral tortuous hydronephrosis due to fibrotic stenosis, without obstruction; urinalysis revealed 23078 u/L leukocytes, and urine culture isolated *E. faecalis*. Renal function improved after bladder catheterization (creatinine 3.2 mg/dL), and he was treated with a 10-days course of effective antibiotics, resulting in partial improvement of initial complaints. Nonetheless, leukocyturia persisted (19061 u/L), raising suspicion towards UGTB, given history of bone disease, BCG instillation, and major urinary tract distortion. Nucleic acid amplification test and culture was positive for *M. tuberculosis* complex. Standard anti-tuberculous therapy was initiated, with resolution of clinical and urinary abnormalities, and he was discharged at D25.

Discussion: UGTB, while common, remains a neglected entity, with delayed diagnosis leading to disease progression and potentially serious organ damage, due to chronic inflammation. A high suspicion is paramount, in the setting of classical risk factors, and urinary symptoms refractory to antibiotics.

Keywords: *urogenital tuberculosis, BCG, tuberculosis reactivation*

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[Abstract:2825]

THE FIRST FEMALE: FROM BLADDER CANCER TO DISSEMINATED BCG

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Intravesical bacillus Calmette-Guérin (BCG) is the most effective adjuvant therapy in intermediate and high-grade non-muscle invasive bladder cancer to prevent recurrence via local immune response. Disseminated BCG infections account for 0.5-2% of total complications, and early occurrence has low probability of *Mycobacterial* identification. Early infections, with a median time of one week after the last instillation, exhibit organ-specific clustering of pulmonary, hepatic and myeloid effects. Literature review of miliary tuberculosis from BCG found only male patients, and this report describes the first female.

Two weeks after the third instillation of intravesical BCG, she presented with dry cough, reduced oral intake, dizziness and fatigue. Examination noted hypotension, jaundice, abdominal distension, hepatomegaly and right upper quadrant tenderness. Labs revealed raised inflammatory markers with deranged liver and renal function. Ultrasound abdomen was unremarkable but persistent temperature spikes prompted computed tomography (CT) abdomen and pelvis, which identified hepatic cysts and marked abnormality in lung bases. Chest radiograph and CT thorax discovered diffuse miliary nodules and mediastinal lymphadenopathy. Bronchoscopy, QuantiFERON and blood culture for acid-fast bacilli (AFB) were negative. Days later, urine sample detected AFB and she commenced rifampicin, isoniazid and ethambutol for six months.

Currently, no standardised treatment guideline for disseminated BCG infection exists, however reports have endorsed using a combination of anti-mycobacterial therapy, and corticosteroids if hypersensitivity or respiratory failure is suspected. More research is necessary to determine the most efficient diagnostic method and development of a standardised treatment regimen.

Keywords: miliary tuberculosis, disseminated BCG, bladder cancer, rare, female

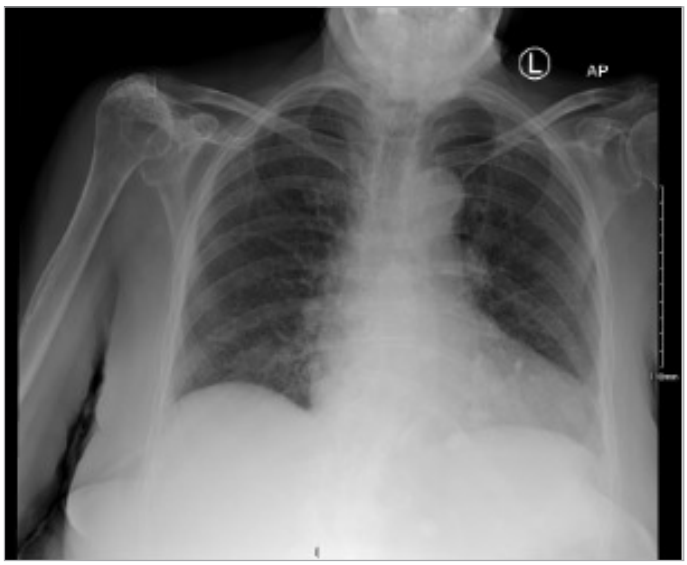

Figure 1. *Chest radiograph taken on admission. Demonstrating miliary pulmonary nodules and bilateral pleural effusions.*

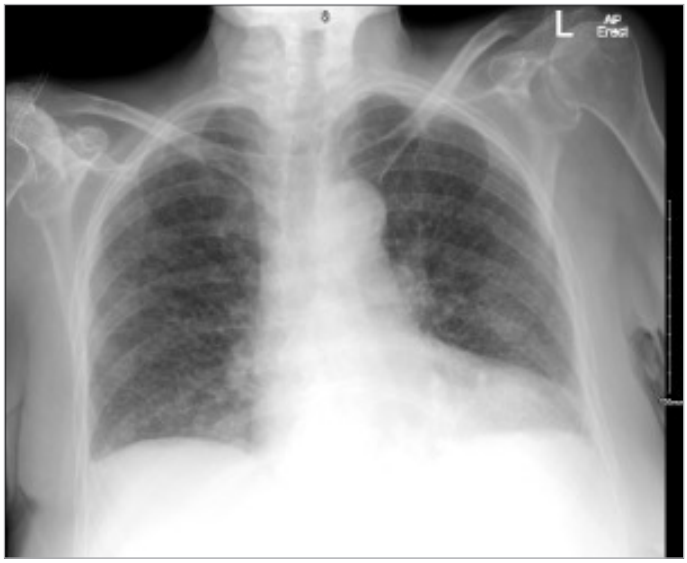

Figure 2. *Chest radiograph taken six days after the initial imaging. Illustrating bilateral small pleural effusions, right greater than left; extensive diffuse nodular opacification of bilateral lungs, more prominent miliary nodules.*

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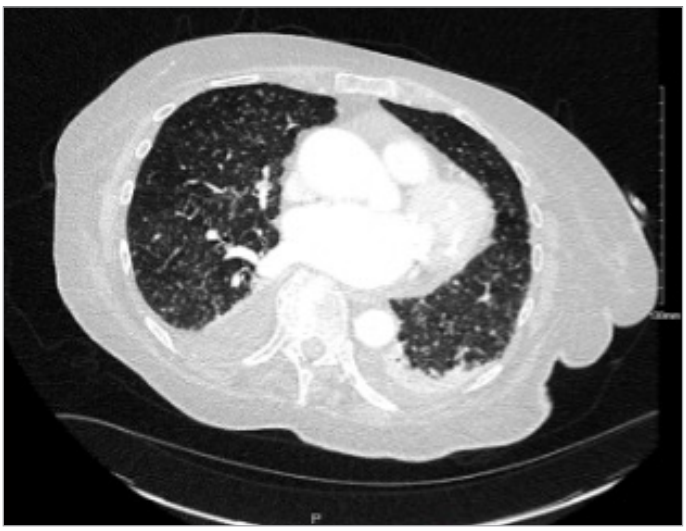

Figure 3. Computed tomography of thorax.
Showing diffuse miliary nodules throughout both lungs, enlarged mediastinal and right hilar nodes, bilateral pleural effusions, larger on the right and small pericardial effusion.

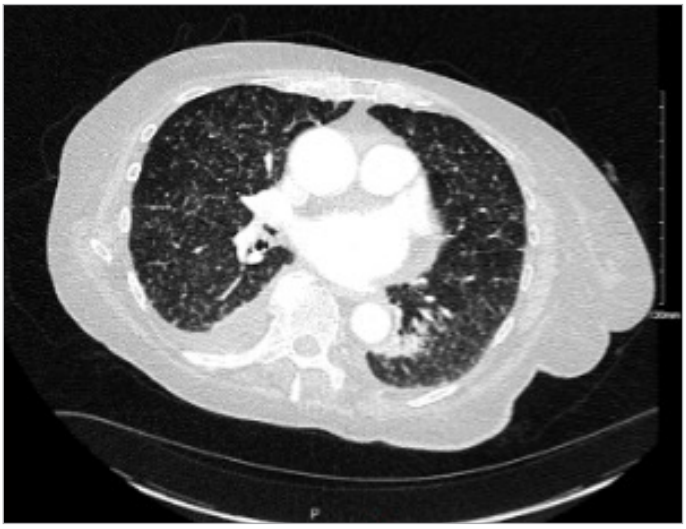

Figure 4. Computed tomography of thorax.
Showing diffuse miliary nodules throughout both lungs, enlarged mediastinal and right hilar nodes, bilateral pleural effusions, larger on the right and small pericardial effusion.

[Abstract:2844]

MORTALITY OF BACTERAEMIA DUE TO *STAPHYLOCOCCUS AUREUS* IN A TERTIARY HOSPITAL

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Staphylococcus aureus is an aggressive germ with an increasing incidence and complication rates. We evaluated mortality due to these bacteraemia in our hospital.

We analysed isolation of *S. aureus* in blood culture samples during 2020. Epidemiological variables, methicillin resistance, focus, acquisition, empirical/targeted treatment and other risk factors were obtained. Mortality data were registered.

We obtained 93 patients, 68.82% men, with a mean age of 71.4. 32.26% had prosthetic material. 38.71% had admission/surgical manipulation the previous month. Acquisition: nosocomial (54.84%), community (34.41%) and health care associated (10%). 74.19% were SAMS (55.07% nosocomial) and 25.81% MRSA (54.17% nosocomial).

30 day-mortality was 32.26%, 24.73% attributable. In MRSA, 30 day-mortality (50% vs. 26.09% p=0.04), attributable and current overall mortality (87.5% vs. 55.07%, p=0.009) were higher. In prosthetic material there was greater overall (40% vs. 8.57%, p=0.349) and attributable mortality (33.33% vs. 20.63%, p=0.205). Also in those with unknown focus at 30 days (50% vs. 26.76%, p=0.0699), with significant differences in attributable mortality (45.55% vs. 18.31%, p=0.011). We observed lower 30-day (27.14% vs. 47.83%, p=0.0765) and attributable mortality (20% vs. 39.13% p=0.0975) in patients with adequate empirical treatment. No differences were seen in dual therapy and gap bacteraemia didn't show an impact.

The overall survival curve (Figure 1) showed a median of 6 months (0.162-1.98 years). 43% one year, 38.7% two and 36.5% three.

The mortality in bacteraemia due to *S. aureus* is high, especially in resistant strains, prosthetic material carriers and in unknown sources. In our series, no greater mortality was demonstrated in gap bacteriaemia.

Keywords: *bacteraemia, S. aureus, mortality*

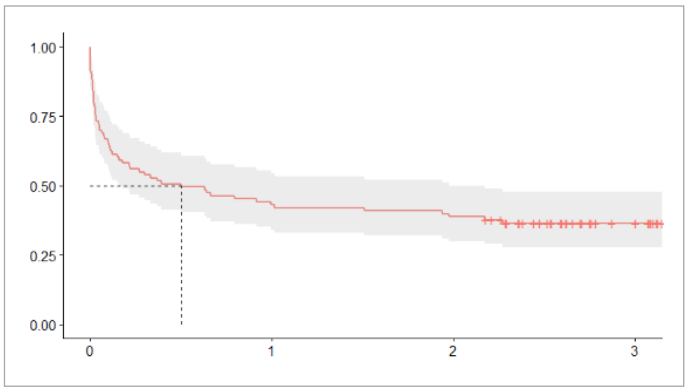

Figure 1. Overall survival curve for S. aureus bacteraemia (Kaplan-Meier). X-axis: time in years. Ordinate axis: probability of survival.

[Abstract:2857]

EMPYEMA IN A PATIENT WITH TUBERCULOSIS

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Woman, 38 years old, recently diagnosed with pulmonary tuberculosis who had been taking antibacillary medication for 15

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days. She was admitted to the emergency department due to a cough with purulent sputum associated with right-sided pleuritic chest pain with 2 weeks evolution. She reported a fever since the previous day.
Analytically with an increase in inflammatory parameters and a chest CT scan was performed, which revealed a medium-volume pleural effusion on the right, loculated. A directed thoracentesis was performed with liquid output compatible with exudate, with a pH of 6.9, glucose < 4 mg/dL, which was an empyema. A chest tube was placed and targeted antibiotic therapy was started with piperacillin and tazobactan. In sputum culture tests, *Streptococus pneumoniae* was isolated and blood cultures were negative. The search for *M. tuberculosis* DNA in the pleural fluid and ADA levels were also negative. The cytology of the liquid showed the presence of numerous inflammatory cells.
During hospitalization, there was an increase in liver enzymes in to a iatrogenic context, after excluding other possible causes.
From a pulmonary point of view, the patient had a good clinical and analytical evolution, with sustained apyrexia, without chest drainage after 6 days, which is why the chest tube was removed.
The patient completed 6 weeks of targeted antibiotic therapy, with the last two weeks being completed under home hospitalization given the patient's clinical stability.
She underwent a control CT scan of the chest after 6 weeks of antibiotics, reporting a significant reduction in pleural effusion.

Keywords: *pulmonary tuberculosis, empyema, Streptococus pneumoniae, antibacillary drugs*

[Abstract:2860]

CLINICAL CASE: A SPONDYLODISCITIS

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Male, 73 years old, self-employed with a history of chronic liver disease of alcoholic aetiology and non-insulin-treated type 2 diabetes mellitus. He was admitted to the emergency department due to asthenia, anorexia and loss of muscle strength in all four limbs with a 2-week evolution associated with constipation. He was hemodynamically stable, on physical examination he was conscious but disoriented in time and had flapping. A head CT scan was performed, which revealed no acute changes and analytically only showed an increase in inflammatory parameters. He underwent diagnostic paracentesis which did not meet the criteria for spontaneous bacterial peritonitis, and was hospitalized for grade 1 hepatic encephalopathy in the context of decompensated chronic liver disease.
During the first 24 hours of hospitalization, the patient presented with neck pain and stiffness, without fever, which is why he underwent an urgent cervical MRI which demonstrated changes compatible with spondylodiscitis. At the same time, blood cultures isolated multidrug-resistant *Staphylococcus aureus* and vancomycin was started.
He was evaluated by Orthopedics, without criteria for urgent surgical intervention.
During hospitalization, the patient presented poor clinical and analytical evolution, with arterial hypotension and worsening of renal function, which led to the suspension of the antibiotic. The patient culminated in cardiorespiratory arrest that was reversed after advanced life support measures. He was admitted to the Intensive Care service, however, despite all therapeutic measures, the patient died.

Keywords: *spondylodiscitis, chronic liver disease, loss of muscle strength*

[Abstract:2862]

MASKED MENINGITIS: A CLINICAL CASE

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A 72-year-old man, independent, with a history of high blood pressure and dyslipidaemia, medicated and controlled, was admitted to the emergency department due to deviation of the labial commissure and decreased occlusion force in the right eye with two hours of evolution. No other complaints, namely fever or changes in strength or sensitivity. He was hemodynamically stable, in apyrexia, on physical examination there was no neck stiffness and on neurological examination he only showed right peripheral facial paralysis.
Analytically, there were no changes except leukocytosis of 13000.
A cranial CT scan was performed, which excluded acute changes. Bell's facial palsy was assumed, and corticosteroid therapy was started.
During his stay in the Observation Service, the patient presented an episode of vomiting after ingesting food. Furthermore, a subfebrile temperature of 37.8ºC was recorded, which is why a lumbar puncture was performed which revealed an infection of the central nervous system (CSF with the presence of 587 leukocytes with a predominance of 82% polymorphonuclear and 18% lymphocytes). *Listeria monocytogenes*, sensitive only to meropenem, was isolated from cerebrospinal fluid.
During hospitalization the patient had good clinical evolution with complete resolution of neurological changes, in sustained apyrexia, completing 21 days of meropenem.

Keywords: *Bell's facial palsy, Listeria monocytogenes, infection of the central nervous system*

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[Abstract:2873]

SEPTIC ARTHRITIS DUE TO JOINT INJECTION

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Case Description: We report the case of a 66-year-old woman with a past medical history of hypertension and breast cancer in remission. She had been diagnosed a month earlier of a complex meniscal tear with joint effusion. She received local anaesthetic infiltration and underwent two arthrocentesis. The fluid was not analysed but was described as "turbid". At the time, she required anti-inflammatory drugs three times daily for pain control.

She consults again with persistent pain, bilateral lower limb oedema, exertional dyspnoea and low-grade fever. Laboratory findings show an acute renal failure (estimated glomerular filtration rate 50 ml/min/m^3) and proteinuria (1'5 g/24h).

Clinical Hypothesis: Given the low-grade fever and the arthritis, septic arthritis was suspected. Nevertheless, the renal impairment and proteinuria suggested an autoimmune disease.

Diagnostic Pathway: A complete autoimmune panel was negative. A new arthrocentesis was performed, obtaining a cloudy fluid where Methicillin-Sensitive *Staphylococcus aureus* was isolated. A second urine test determined the proteinuria had resolved. The patient received joint drainage and cefazolin for 2 weeks with clinical improvement.

Discussion and Learning Points: Septic arthritis commonly arises via hematogenous seeding, but recent joint injections or procedures must be considered. The diagnosis is based on synovial fluid analysis and culture, and management consists of joint drainage and antibiotic therapy.

Keywords: *septic arthritis, MSSA, joint injection*

[Abstract:2898]

NOCARDIA: WHEN A PICTURE IS WORTH A THOUSAND WORDS

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A 93-year-old man came to the emergency room with pain in his left hip. His personal history includes: hypertension, atrial fibrillation, degenerative spondyloarthropathy and he carriers bilateral hip prosthesis for more than 15 years.

He went to the emergency room in April 2021 due to abrupt left coxalgia without a triggering cause. A joint X-ray was performed showing cup mobilization and he was admitted to Traumatology with a diagnosis of aseptic mobilization of the prosthesis (Figure 1). Surgical intervention was performed and after the initial incision, a friable, brownish material was observed underneath, with intrafascial involvement that is described as "pseudotumor." (Figures 2 and 3). Samples are sent to Pathological Anatomy (chronic inflammation and xanthogranulomatous reaction) and Microbiology, with isolation of *Nocardia* sp. After removal of the prosthesis and initiation of treatment with trimetropim/sulfamethoxazole 160/800 mg for nine months, the patient progressed favourably, remaining asymptomatic at the present time.

Nocardia constitutes a genus of saprophytic soil microorganisms that, although it can affect immunocompetent patients, is related to states of immunosuppression. The infection can be localized (most frequently pulmonary), although hematogenous spread is characteristic. It frequently produces chronic infections, with tissue infiltration that appears tumorous, granulomatous, and brownish in colour. Joint infections are very rare and there are only 37 cases described in the literature, of which only 5 were carriers of prosthetic material and in most of them, the source of infection was known. For all these reasons, our patient represents an exceptional case of prosthetic infection due to Nocardia.

Keywords: *joint, infection, nocardia, prosthetic*

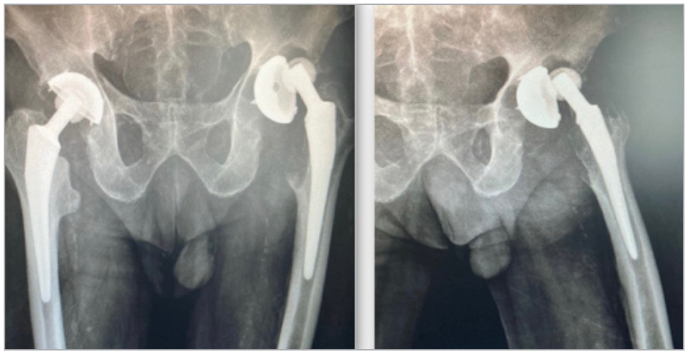

Figure 1.

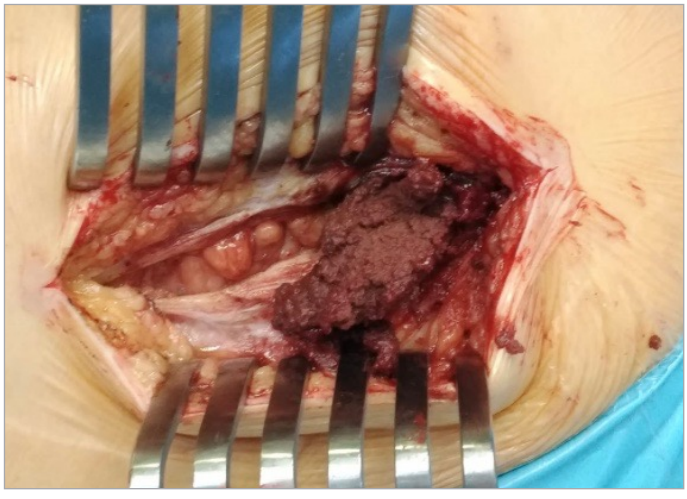

Figure 2.

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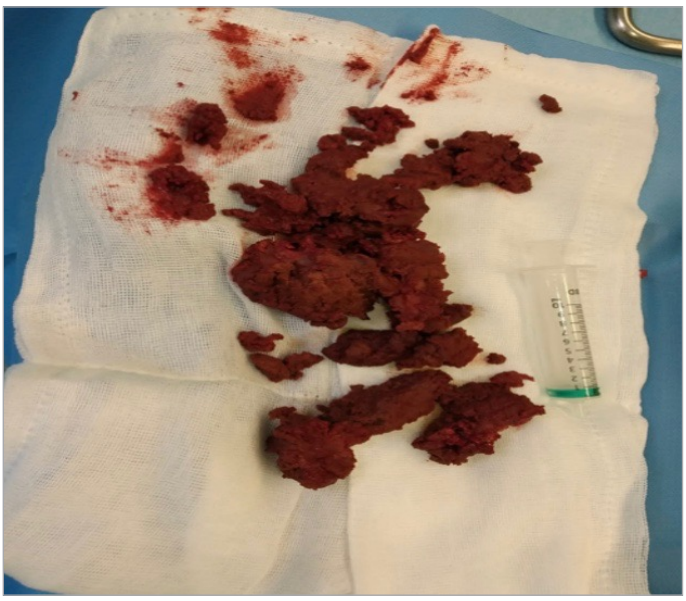

Figure 3.

[Abstract:2901]

NEUROLOGICAL DETERIORATION IN A TRAVELING PATIENT

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A 53-year-old woman, who after traveling to South Africa began with general malaise and diarrhea lasting several weeks, followed by headache, obtundation and fever with a tendency to deterioration of the neurological status (Glasgow 8/15 O2V1M5) and increased work of breathing, with need for orotracheal intubation and connection to invasive mechanical ventilation.

In analytical control, C-reactive protein of 28.3 mg/L stands out, with white series without alterations. Computed tomography of the skull was performed with data of encephalitis, and lumbar puncture with isolation of *Herpes simplex virus* type 1, diagnosing herpetic encephalitis, starting targeted treatment with acyclovir 750 mg every 8 hours and dexamethasone 8 mg every 8 hours. In the context of intubation, he developed respiratory infection due to *Staphylococcus aureus* and *Pseudomona aeruginosa*, requiring antibiotic treatment.

After several weeks, the patient required a tracheostomy and began to reduce sedation, also performing respiratory and general physiotherapy with good progress.

As sequelae, he presents hypotonia and cognitive changes, but retains independence of basic activities.

Involvement of the central nervous system requires early diagnosis given the high morbidity and mortality it presents, with deterioration in quality of life and important sequelae. In our case, it was necessary to screen for endemic diseases in other regions. Among encephalitis, the one caused by herpes simplex virus 1 stands out, being the most common cause of sporadic fatal encephalitis worldwide, with acute and severe symptoms, even despite antiviral treatment (acyclovir).

Keywords: *encephalitis, herpes, superinfection*

[Abstract:2915]

DIARRHOEAL SYNDROME AND THROMBOEMBOLIC PHENOMENA

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A 71-year-old man with a history of hypertension and diabetes consulted for progressive deterioration over several months, associated in the last week with diarrhoea and fever.

On arrival at the emergency department, he was in poor general condition despite maintaining haemodynamic stability, with marked malnutrition and abdominal pain.

Complementary tests included: blood test with 393 mg/L of C-reactive protein (CRP) and 2.18 ng/mL of procalcitonin and CT scan of the abdomen with findings compatible with colitis. A stool culture was requested and multisensitive *Salmonella enterica* was isolated starting treatment with ceftriaxone.

After 48 hours, he began to show a sudden clinical deterioration, with hypotension and tachycardia. Suspecting septicaemia, blood cultures were taken (which were subsequently negative) and treatment with meropenem was started. A new CT scan of the abdomen was requested, which showed acute ileitis and new splenic and renal infarctions, as well as thrombosis of the left external iliac artery. Given the findings, anticoagulation was started.

Given the possibility of septic emboli, a transesophageal echocardiogram was requested, which was normal, and a CT angiogram of the aorta, ruling out aortitis, but with findings of pulmonary thromboembolism.

Therefore, taking into account the multiple arterial and venous thromboembolic events in a patient with an active salmonella infection, we considered the possibility of a diagnosis of catastrophic antiphospholipid syndrome (CAPS) and started empirical treatment with corticosteroids. We requested a regular analysis in which the lupus anticoagulant (LA) was positive. Finally, after multiple complications related to the diagnosis, the patient died.

Keywords: *Salmonella enterica, septicaemia, catastrophic antiphospholipid syndrome, lupus anticoagulant*

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[Abstract:2917]

CEREBRAL SPACE-OCCUPYING LESIONS IN A SEVERELY IMMUNOCOMPROMISED HIV PATIENT: A CLINICAL CASE

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A 45-year-old man, an indigent and injectable drug user with a 13-year history of human immunodeficiency virus (HIV) infection, lacking regular monitoring or antiretroviral therapy (ART), was admitted to the hospital after being discovered unconscious on a public street. Upon admission, he was alert, cachectic, with motor aphasia, right central facial paresis, right homonymous hemianopia, and right hemiparesis on neurological examination. Laboratory analysis showed anaemia and lymphopenia, C-reaction-protein 149 mg/L. Lymphocyte phenotyping revealed just 1 T-CD4+/mm^3 and HIV viral load of 363,559 copies/µL. Brain-computed tomography and magnetic resonance imaging (MRI) exposed multiple bilateral space-occupying lesions, including a 3.5 cm striatocapsular expansive lesion with peripheral contrast enhancement [Fig 1]. Lumbar puncture revealed a cerebrospinal fluid (CSF) with no cells and 40% glucose consumption. Molecular assays for herpes viruses, *Cryptococcus* antigen test, and VDRL were negative, pending *Toxoplasma gondii* DNA-testing and cultural studies. Blood cultures were positive for *Escherichia coli*. Empirical treatment for suspected cerebral toxoplasmosis with sulfadiazine, pyrimethamine, and folinate was started, alongside antibiotic therapy with ceftriaxone and ampicillin. A positive *Toxoplasma gondii* result was obtained, however, *Cryptococcus neoformans* was also isolated in the CSF culture, with negative culture for bacteria. Induction therapy with flucytosine and liposomal amphotericin B was started. The MRI one month later demonstrated a lesion reduction and ART was initiated without complications. The evaluation of HIV patients with cerebral lesions poses challenges, with the degree of immunosuppression being an important factor in the differential diagnosis. We must not forget that multiple aetiologies can coexist in an immunosuppressed individual.

Keywords: *HIV, Cryptococcus, Cerebral toxoplasmosis*

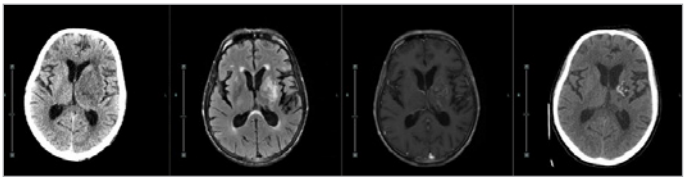

Figure 1. *The initial image (left panel) depicts a space-occupying lesion within the basal ganglia observed in the initial brain-computed tomography, subsequently confirmed by MRI with peripheral contrast uptake, evident in the second and third images. The image on the right illustrates a follow-up brain-computed tomography conducted after 9 months, demonstrating a discernible reduction in the lesions, with just an calcified residual sequelae.*

[Abstract:2935]

VISCERAL LEISHMANIASIS PRESENTING AS ISOLATED CERVICAL LYMPHADENOPATHY

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Case Description: A 60-year-old woman presented with a five-month history of left lateral neck swelling. There was no history of fever, weight loss, night sweating or loss of appetite. Her past medical history included rheumatoid arthritis on immunosuppressive therapy and diabetes mellitus. On physical examination, there was a 4 × 3 cm firm, nontender and mobile left submandibular lymph node. The liver and spleen were not palpable. The remainder of the examination was unremarkable. Complete blood count showed no abnormalities. Chest X-ray and ultrasound of the abdomen were normal.

Clinical Hypothesis: The main clinical hypotheses were tuberculous lymphadenitis and lymphoma.

Diagnostic Pathways: A fine needle aspiration of the cervical lymph node was performed. Microscopic examination showed polymorphous population of lymphoid cells and macrophages filled with intracellular *Leishmania* amastigotes. Bone marrow aspiration showed no evidence of leishmaniasis. HIV antibody test was negative. The final diagnosis of leishmanial lymphadenitis was established. The patient was put on amphotericin B deoxycholate for 3 weeks. She had no relapse during the twelve-month follow-up period.

Discussion and Learning Points: Visceral leishmaniasis is a vector-borne disease caused by *Leishmania* protozoa. It is characterized by prolonged fever, weight loss, enlargement of the spleen and/or liver, and anaemia. Visceral leishmaniasis with isolated lymph node involvement is an uncommon presentation, even in endemic areas. Thus, leishmaniasis should be considered as a rare cause of isolated lymphadenopathy, especially in immunocompromised hosts. Fine needle aspiration cytology is a quick, cheap and reliable diagnostic tool for localized leishmanial lymphadenitis.

Keywords: *visceral leishmaniasis, lymphadenopathy, leishmanial lymphadenitis*

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[Abstract:2936]

TWO DISEASES, SAME SYMPTOMS

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Introduction: Tuberculosis is one of the most common infections in developing countries. Tuberculous meningitis (TBM) is a manifestation of extrapulmonary TB, developing in 1%-5% of the approximately 10 million TB cases worldwide.

Methods: We present the case of a 22-year-old female patient, the onset of symptoms 10 days prior the presentation by bilious vomiting, abdominal pain, hospitalized in the Surgery Clinic for 6 days with the diagnosis of acute cholecystitis, but discharged. Now, is admitted in the ER with vomiting, diffuse abdominal pain, more intense in upper abdomen and intense headache. CT scan is performed: gallstones, a main bile duct of 7 mm and gastroparesis in revealed, along with acute pancreatitis (amylasis-250 U/L, leukocytosis-13000/mm^3) is admitted to the Internal Medicine Clinic. Under medication (antiemetics, analgesics, antibiotics), the digestive symptoms improve, but photophobia appears. After many evaluations, a lumbar puncture raised the suspicion of tuberculous meningitis. New CT scan is performed, which describes meningeal tuberculoma and bacillary leptomeningitis, associates hydrocephalus, but also biliary pancreatitis stage B. The patient is transferred to the Intensive Care Service of the Clinical Hospital for Infectious Diseases in Craiova, where she dies shortly after anti-tuberculosis therapy is initiated.

Conclusions: The peculiarity of the case is the non-specific symptomatology with headache, nausea, vomiting, the presence of both biliary pancreatitis and bacillary meningitis with similar digestive symptoms as well as neurological symptoms if a pancreatic encephalopathy is to be considered. Another peculiarity is the age of the patient, TB meningitis being a condition encountered in children between 2-6 years old.

Keywords: *Bacillary meningitis, photophobia, biliary pancreatitis.*

[Abstract:2938]

BEYOND HEMOPTYSIS. RASMUSSEN PSEUDOANEURYSM IN A PATIENT WITH NECROTIZING PNEUMONIA. A CASE REPORT

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A 44-year-old man with past history of drug consumption (speed, and cocaine) was admitted to the emergency department with a 4-month history of cough and hyperoxia. In the last 3 weeks he had also presented haemoptysis, 3 kg weight loss and fever over 39°C. On physical examination the oxygen saturation was over 94% on room air, he presented crackles and amphoric breath in right middle lung field. Laboratory data revealed leukocyte count 16.3 x10^9/L (NR between 4.00 and 11.00), total neutrophil count 13.3 x10^9/L (2.0–7.0) total lymphocyte count 1.6 x10^9/L (0.9–4.5), CRP 220 mg/dL (NR < 1.00), Ferritin 265 ng/mL (20–400). HIV serology, QuantiFERON and mycobacterial culture were negative. A chest x-ray showed a complete middle lobe pneumonia. Empirical therapy with ceftriaxone and azithromycin was started. There was no clinical improvement in the first 48 hours, so a chest CT scan was performed. The presence of necrotizing pneumonia of the right middle lobe was confirmed along with signs of peripheral inflammatory pneumonitis that was associated with toxic consumption. In the same location also a cavernomatous lesion was evident, with a Rasmussen pseudoaneurysm inside without signs of active bleeding. Antibiotic therapy was modified to meropenem, clindamycin and linezolid with normalization of fever and improvement of analytical parameters in the first 48 hours. After 7 days of targeted antibiotic therapy, embolization of the Rasmussen pseudoaneurysm was performed without incident. The patient completed 4 weeks of intravenous antibiotic therapy with complete restructuring of the lung parenchyma and without new vascular lesions.

Keywords: *necrotizing pneumonia, Rasmussen pseudoaneurys, drugs consumption*

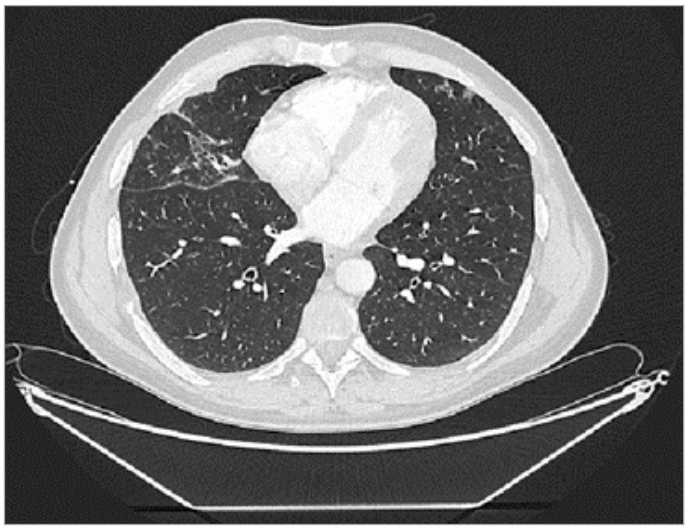

Figure 1. *Control CT scan after 4 weeks of antibiotic therapy with complete resolution of necrotizing pneumonia.*

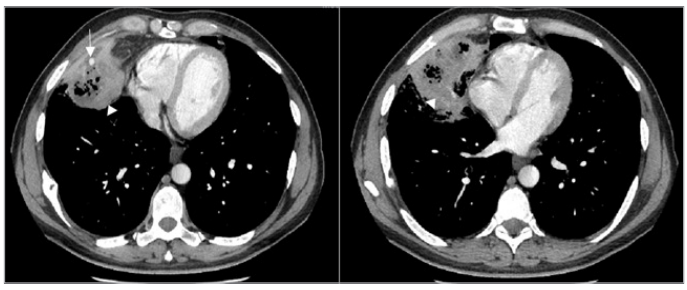

Figure 2. *Rasmussen's pseudoaneurysm is marked with an arrow. In turn, necrotizing pneumonia is marked with a triangle.*

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[Abstract:2944]

PRIMARY TUBERCULOSIS OF UPPER AERODIGESTIVE TRACT MIMICKING A NEOPLASM

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Case Description: A 58-year-old male patient, an active smoker, presented with a twelve-month history of a sore throat, progressive dysphagia, anorexia, and weight loss.

He denied symptoms of fever, night sweats, chronic cough, or haemoptysis. There was no family or past history of tuberculosis. On physical examination, there was an ulceroproliferative mass involving the right tonsil, uvula, and soft palate associated with bilateral cervical lymph nodes.

Clinical Hypothesis: Given the patient's smoking history, squamous cell carcinoma of the upper aerodigestive tract (UAT) was raised as the main diagnostic hypothesis. However, other diagnoses were considered, such as actinomycosis, tuberculosis, and haematological malignancies.

Diagnostic Pathways: Direct laryngoscopy showed an ulceroproliferative, bulging mass of the right tonsil infiltrating the uvula, soft palate, base of the tongue, and epiglottis associated with laryngeal immobility. A punch biopsy of the right tonsil, base of the tongue, and epiglottis was performed. Histopathological examination revealed granulomas and caseous necrosis consistent with tuberculosis. Sputum samples showed no acid-fast bacilli on Ziehl-Neelsen staining. Computed tomography scan of the chest and abdomen was unremarkable. Subsequently, the diagnosis of primary UAT tuberculosis was established, and antituberculosis treatment was initiated.

Discussion and Learning Points: Tuberculous involvement of the UAT is uncommon and usually secondary to pulmonary tuberculosis. Non-specific clinical presentations, challenges in obtaining adequate diagnostic samples, and the paucibacillary nature of the disease collectively contribute to the increased difficulty in diagnosing UAT tuberculosis. Thus, tuberculosis should be kept in the differential diagnosis of UAT diseases, even in the absence of pulmonary involvement.

Keywords: tuberculosis, upper aerodigestive tract, biopsy, histopathological examination

[Abstract:2967]

MEDITERRANEAN VISCERAL LEISHMANIASIS: A RETROSPECTIVE STUDY ON DEMOGRAPHIC FEATURES, CLINICAL MANIFESTATIONS, LABORATORY FINDINGS, AND OUTCOMES IN HIV-NEGATIVE ADULTS

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Background and Purpose: Mediterranean visceral leishmaniasis (VL) predominantly affects children under five. However, there is an increasing incidence of infections among adults. The aim of this study was to describe the epidemiology, clinical and laboratory features, treatment and outcomes of VL in HIV-negative adults.

Methods: A retrospective analysis of records from 2000 to 2022 was conducted on patients diagnosed with VL. Inclusion criteria: age over 16, symptoms suggestive of VL, and serological/parasitological confirmation. HIV-infected patients were excluded.

Findings: Twenty-six patients (20 males, 6 females) were included. Median age at diagnosis was 37.5 years. Sixteen (62%) lived in rural areas. Underlying conditions were reported in 9 patients: diabetes mellitus (n=4), rheumatic/kidney disease on immunosuppressive therapy (n=3), chronic granulomatous disease (n=1), lymphoma (n=1), and thymoma (n=1). Fever (n=25), deterioration of general condition (n=23), and gastrointestinal symptoms (n=12) were the most common symptoms. Median delay from onset to diagnosis was 51 days (range: 10-216). On admission, twenty-five patients had splenomegaly, nineteen hepatomegaly, and three enlarged lymph nodes. Anaemia and leukopenia were the commonest haematologic findings (88%), followed by thrombocytopenia (85%). Microscopic examination of smears of tissue aspirates revealed amastigotes in 18 patients; others were diagnosed via serological tests or polymerase chain reaction. Treatment included amphotericin B (n=18) and pentavalent antimony (n=8). Two patients died during the course of treatment, and relapse occurred in 3 patients.

Conclusions: In this study, HIV-negative adults with VL exhibited classic features including fever, enlarged spleen, and anaemia. Early diagnosis and appropriate treatment are crucial for improving outcomes.

Keywords: visceral leishmaniasis, HIV-negative, adults

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[Abstract:2985]

NOT EVERYTHING IS AS IT SEEMS

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Introduction: Spondylodiscitis may involve the vertebral bodies, intervertebral discs, paravertebral structures, and spinal canal, with potentially high morbidity and mortality rates. In this pathology, symptoms can be nonspecific, often causing a delay in diagnosis.

Case Presentation: A 75-year-old woman with a medical history of hypertension, type 2 diabetes mellitus, dyslipidaemia, obesity, heart failure with preserved ejection fraction of unknown aetiology, chronic obstructive pulmonary disease and degenerative lumbar spine disease presented to the Emergency Department with a 6-month history of dyspnoea, recently worsening and productive cough. On admission, she was hemodynamically stable, afebrile, peripheral O_2 saturation was 95% without oxygen therapy, and maintained vesicular murmur in pulmonary auscultation with crackles at the base of the left lung. Laboratory analysis showed elevated inflammatory parameters (White Blood Count - 14.17 x 10^9/L; C-reactive protein 343 mg/L). Chest CT revealed consolidation in the left lower lobe. The patient was admitted to Internal Medicine for Community-Acquired Pneumonia. During the initial ward assessment, given the absence of respiratory failure and subtle respiratory symptoms (attributable to underlying conditions), other diagnostic hypotheses were considered. The patient reported worsened lower back pain, and physical examination revealed tenderness of the lumbar spine spinous processes. An MRI was requested, confirming lumbosacral spondylodiscitis with abscesses at S1 and S2.

Conclusions: The patient completed four weeks of antibiotic therapy with no isolation of microbiological agents. Despite being considered, surgical intervention was not indicated due to the absence of neurological deficits and favourable imaging evolution.

Keywords: *discitis, spinal infection, spondylodiscitis*

[Abstract:3014]

CHASING THE FOURTH 90. HEALTH-RELATED QUALITY OF LIFE ANALYSIS OF PEOPLE LIVING WITH HIV IN A "FAST-TRACK" CITY

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In this cross-sectional observational study of 58 patients living with HIV (PLWH) we analyse their health-related quality of life (HRQOL) and explore factors associated with poorer HRQOL, as well as estimate compliance with the zero-stigma target of UNAIDS. The WHOQOL-HIV-BREF questionnaire was used to assess HRQOL. Our results were compared with a reference cohort (Fuster-Ruiz de Apodaca et al, 2019) to estimate compliance with the "fourth 90" target in our setting.

72.4% were males with median age of 53 years. 24.1% had a history of injecting drug use, and 25.9% had psychiatric comorbidity. 32.8% presented with AIDS at diagnosis.

When stratifying HRQOL in our population using the reference cohort, 79.3% obtained medium to high scores in the overall questionnaire. The domains of psychological health and social relationships obtained the lowest scores (medium to high values in 65.5% and 62.1%).

In the multivariate analysis, psychiatric comorbidity was significantly associated with poorer HRQOL (p.039; CI -22.79, -0.59). Significant associations were also found with the route of infection acquisition (p.021; CI 2.55, 29.89), and higher education levels were associated with better HRQOL (p.016; CI 3.55, 32.61). It was observed that PLWH with later-stage debut had better scores (p.037), and this trend seemed to persist in older individuals and those with longer infection duration.

Approximately 80% reported good HRQOL, so the "fourth 90" target has not been achieved. Increased psychological and strengthen disease understanding, especially in recently diagnosed patients, those with lower educational levels, or significant comorbidities, could enhance the HRQOL of PLWH.

Keywords: *quality of life, HIV, WHOQOL-HIV-BREF*

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[Abstract:3029]

PLASMODIUM FALCIPARUM MALARIA FOLLOWING BLOOD TRANSFUSION IN UAE

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Background: The prevalence of transfusion associated infections are rarely reported in the United Arab Emirates (UAE) due to the present of widespread screening tests. We report an unusual case of plasmodium falciparum malaria following a blood transfusion in the UAE, raising the importance of pretransfusion screening measures in particular screening of transfusion-transmissible infections.

Study Design and Methods: This is a case report with review of literature and blood donor screening tests.

Results: A 32-year-old female with thalassemia major and regular blood transfusion presented with 1 week history of fever, chills and rigors following a history of blood transfusion. She was admitted to the hospital for further investigation of fever of unknown origin. During her admission she received multiple units of blood transfusion and was persistently spiking high-grade fever throughout her hospitalization. Extensive investigations with laboratory and imaging modalities were all unremarkable. On day 10 of admission haematology lab called the primary physician about the presence of malaria parasites on patient's blood smear. A retrospective investigation was initiated by the hospital infection control to identify the potential donor.

Conclusions: Enhancement of blood screening tests to include malaria smear and antigen testing is essential to maintain safety of blood supply from donor to recipients even in non-endemic areas.

Keywords: *blood transfusion, fever, Malaria plasmodium, transfusion associated malaria.*

[Abstract:3072]

NASOPHARYNGEAL MYCETOMA ASSOCIATION WITH NICOTIANA RUSTICA CONSUMPTION: A CASE REPORT

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The 37-year-old male patient from Kahramanmaras has worked as a ship worker for the past two years, following a twenty-year tenure in the construction industry. He reports no chronic illnesses and ceases smoking a decade ago after consuming 15 packs yearly for several years. However, he currently uses nicotiana rustica, smoking 4-5 cigarettes daily.

For the past 1.5 years, the patient has experienced sore throat, pain while swallowing, chills, and shivering, seeking medical attention intermittently and receiving multiple oral antibiotics courses (amoxicillin-clavulanate) for diagnosed recurrent sinusitis, with symptoms improving post-antibiotic usage. Night sweats and a 6-kilo weight loss within the last year were reported.

During a recent 7-month ship stay, his sore throat persisted despite oral antibiotics. ENT examination revealed purulent nasopharyngeal secretion, a mass in the posterior nasopharynx, and painful posterior septal lymphadenopathy.

Further investigation included a nasopharyngeal MRI and biopsy due to significant oral intake decline.

Contrast-enhanced nasopharyngeal MRI indicated widespread pathological contrast enhancement and oedema in the mucosal and submucosal areas, especially in the retropharyngeal region. A lesion occupying the nasal cavity, extending to the osteomeatal unit, was hypointense on T2-weighted series and non-enhancing, raising suspicions of fungal infection or mycetoma with maxillary sinus wall erosion. Rhinoscopy was recommended to exclude fungi and differentiate underlying polyps from inflammatory masses.

Infectious and inflammatory pathologies were prioritized in the differential diagnosis as a definitive mass was not identified. An ENT Surgery operation for mycetoma was planned.

Keywords: *nicotiana rustica, mycetoma, rare disease*

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