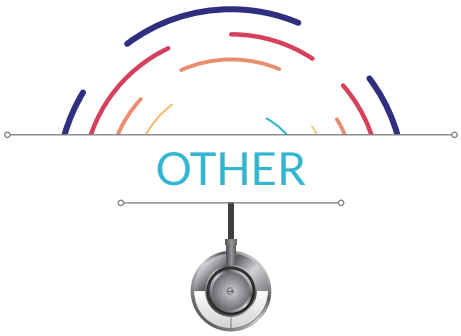

[Abstract:0014]

THE ROLE OF THE SUPERVISOR IN SELF-REGULATED LEARNING IN THE CLINICAL ENVIRONMENT

Nicola Cooper

University of Nottingham, Nottingham, UK

Introduction: Self-regulated learning (SRL) in medical education is important for successful learning and safe patient care. However, supervisors may be unaware of behaviours that explicitly facilitate or inhibit their students' or trainees' SRL, therefore this review explores the role of the supervisor in SRL in clinical environments.

Methods: A qualitative systematic review using meta-aggregation was performed, seeking to draw on the knowledge of included studies and the participants those studies represent to create context-rich recommendations that are relevant and applicable to practice. Categories were developed from individual findings and then synthesised in the form of guidance.

Results: Twenty-two studies were included. Six categories were developed. A supervisor that supports SRL is: adaptive, engaged and supportive, builds trusting relationships, is knowledgeable, reflective, and crafts the architecture of the clinical learning environment.

Conclusions: Within the categories, reciprocal trust and dialogue creates a virtuous cycle of supervisor–learner engagement. However, those in positions of high power must use their power to promote input and participation of those with low power. The curriculum has an important role to play in supervisor–learner relationships. Supervisor training, beliefs about their role, and the architecture of the clinical learning environment also affect learners' SRL.

Keywords: *self-regulated learning, trainee, supervisor, clinical environment*

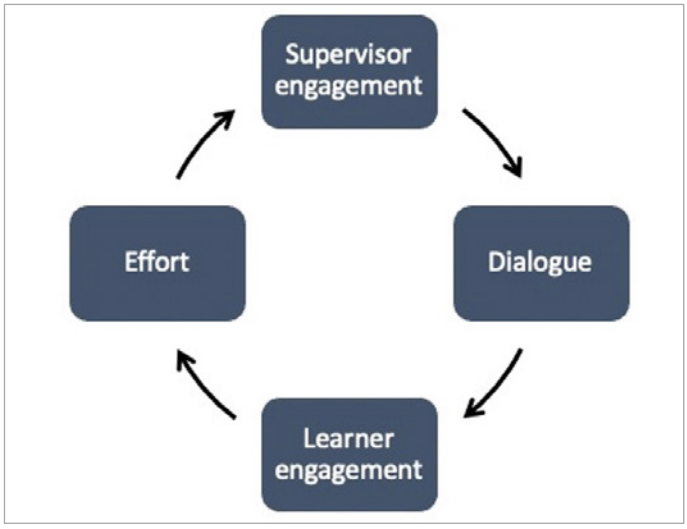

Figure 1.

[Abstract:0048]

MIDLINE CATHETER-ASSOCIATED VENOUS THROMBOSIS OF THE UPPER LIMBS

Ana García Cardoso[1], *Firelli Oblitas Bejar*[1], *Marta Gelis Centeno*[2], *Montserrat Zapater Blas*[2], *Enric García Restoy*[1]

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The study aims to analyse the frequency of deep vein thrombosis in the upper limbs as a complication of midline catheters (MLC) and what risk factors may be associated with it.

The results were analysed and included 85 cases with MLC. The most frequent diagnoses for admission were infectious processes in 40 cases (47.1%), traumatological or orthopaedic pathology in 7 (8.2%), respiratory failure in 6(7.1%), heart failure in 5 (5.9%), neoplasia in 5 (5.9%) and acute myocardial infarction in 4 (4.7%) cases. Sixty-two patients (72.9%) were receiving prophylactic (23 cases) or full (14 cases) anticoagulation therapy. Catheters of diameter 3 French were used in 4 patients (4.7%), 4 French in 63 (74.1%) and 5 French in 18. Eight patients (9.4%) suffered from MLC thrombosis and one patient (1.2%) from catheter infection. Catheter thrombosis was more frequent among patients not receiving anticoagulation therapy during admission (prophylactic or therapeutic doses) (26.1%) compared to those receiving anticoagulation therapy (3.2%) (p=0.004). Catheter

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thrombosis was also more frequently associated with 5 French calibre catheters (33.3%) compared to 3 French or 4 French (3%) (P<0.001). In the multivariate analysis, anticoagulant treatment during admission and catheter calibre were associated, respectively, with a lower and higher risk of MLC thrombosis.
As conclusions, a larger catheter calibre (5 French) has been associated with a higher risk of MLC thrombosis. Anticoagulation therapy during admission at prophylactic or full doses has been associated with a lower risk of MLC thrombosis. This may suggest that, in some patients, thrombotic events could be prevented by administering anticoagulant therapy.

Keywords: *mid-line catheter, thrombosis, upper limbs*

[Abstract:0070]

CREATION OF A MIXED MODEL OF CO-MANAGEMENT FOR SURGICAL AND MEDICAL PATIENTS BY INTERNAL MEDICINE. EXPERIENCE IN A TERTIARY HOSPITAL

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Internal Medicine, Hospital Virgen de las Nieves, Granada, Spain

Introduction: CI (interconsultation) in Hospital Medicine has increasing importance. It is a response to the growing admission of older, comorbid and complex patients in different hospital areas.
Materials and Methods: This is a descriptive, longitudinal and retrospective observational study with quantitative analysis. Patients for whom the different Hospital Services have consulted Internal Medicine in a period of five months have been included.
Results and Discussion: 111 interconsultations were carried out. The mean age was 68.49 years ±σ= 15.72 and median was 72 years. 45.05% (50) were women and 54.95% (61) were men. 84.68% (94) had comorbidities (Charlson index average of 5.79; it was >3 in 82.88% of the patients -92-). 46.8% (52) had malnutrition according to MUST criteria and 48.64% (54) suffered from anemia. The services that carried out the most interconsultations were General Surgery (22.5%, 25), Urology (22.5%, 25) and Digestive (15.3%, 17). The most frequent reasons for consultations were cardiac and respiratory failure, and ionic alterations. The most frequent was the appearance of acute medical problems (67.5%, 75) compared to the decompensation of chronic pathologies (27.9%, 31) and postsurgical complications (5.4%, 6). The mean duration of follow-up was 6 days with a median of 4.50, the longest being 47 days. The final destination of the patients was mostly home discharge in 72.9% (81).
Conclusions: The prototypical profile is an elderly patient with the appearance of an acute medical problem during the postoperative period. The most common outcome was home discharge after a mean follow-up of 6 days.

Keywords: *interconsultation, comorbidities, postsurgical*

[Abstract:0082]

WHERE DID THE IRON GO? A CASE REPORT OF AN IRONMAN WITH EXERCISE-INDUCED IRON DEFICIENCY ANAEMIA

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Endurance athletes who perform frequent aerobic exercises have an increased risk of depleting their iron stores. Some estimates suggest up to 50% of male and female athletes experience iron deficiency anaemia. Compared to their more sedentary counterparts, athletes suffer additional iron losses through excessive perspiration, microscopic hematuria, gastrointestinal losses, and mechanical/oxidative hemolysis. Inflammation-mediated iron sequestration further reduces iron availability for ATP production and metabolism. Amateur athletes may also not be aware of iron-rich foods that improve intestinal iron absorption. We present the case of a middle-aged male athlete who participated in 2-3 marathons and triathlons on a yearly basis, and was incidentally diagnosed with iron deficiency anaemia in March 2019 when attempting to donate blood. Over the course of 3 years, extensive gastrointestinal evaluation, including 2 oesophagogastroduodenoscopies, 2 colonoscopies, 2 capsule small bowel endoscopies, and an antegrade double balloon small bowel enteroscopy were unrevealing. His iron indices (iron, transferrin saturation, and haemoglobin) in the next 4 years worsened with continued or increased exercise intensity but improved with interruption and increased iron replacement (see Graph).
Through this case report, we highlight the importance of: (a) identifying patients exercising at higher intensities who are at risk of iron deficiency and can benefit from dietary advice and supplementation, (b) considering exercise-induced causes as a differential for iron deficiency anaemia in athletes, and (c) possibly avoiding excessive and unnecessary gastrointestinal evaluation in these patients.

Keywords: *iron deficiency, anaemia, aerobic exercise, endurance athletes*

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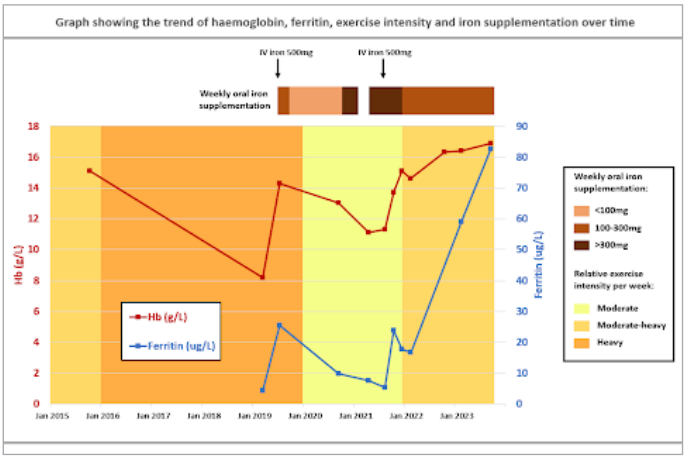

Figure 1. Trend of haemoglobin, ferritin, exercise intensity, and iron supplementation over time.

[Abstract:0290]

USEFULNESS OF POINT OF CARE ULTRASOUND IN A TERTIARY HOSPITAL INTERNAL MEDICINE DEPARTMENT

Brais Fernández Francisco[1], Uxue Millet Oyarzabal[2], Julen Agirre Castillero[1], Iñigo De Serra Tejada[1], Garazi Araña Monedero[1], Paula Balbín Caminero[1], Nerea Fernández Francisco[1], Ainhoa Echenique Clerigué[2], Josu Urbieta Mancisidor[3], Pedro Angel Cuadros Tito[1], Samuel García Rubio[3], Alfonso Gutiérrez Macías[1]

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[2] Department of Cardiology, Basurto University Hospital, Bilbao, Spain

[3] Department of Internal Medicine, Santa Marina Hospital, Bilbao, Spain

Introduction: Point of Care Ultrasound (POCUS) is an increasingly used tool in the healthcare field. We present the preliminary results of a prospective registry designed to analyze its possible usefulness in the Internal Medicine ward in Basurto University Hospital.

Materials and Methods: A computerized registry of POCUS studies was designed. Patients underwent a lung ultrasound and a basic abdominal ultrasound; exploration of other areas was performed according to clinical needs considered by the investigator. Studies completed between 1 February and 31 July 2023 were prospectively collected, recording, as the primary outcome variable, whether and how patient management changed, according to the investigator subjective assessment.

Results: 166 studies were recorded in 94 patients with ultrasound scans of different areas (figure 1). POCUS changed patient management in 88.05% of cases (figures 2 and 3). These changes were mainly related to changes in diagnosis (19.02%), treatment (42.48%) and discharge circumstances (18.14%). POCUS did not change clinical management in 11.95% of the cases.

Conclusions: POCUS can increase the sensitivity and specificity of classical physical examination and provides useful information that contributes to modify patient management in a high proportion of cases. The limitations of our study include a small number of cases, lack of comparison with patients managed without POCUS and a limited time span. Larger studies with a randomized design would be necessary to confirm our results and to assess the real impact of POCUS in the management of our patients.

Keywords: *POCUS, ultrasound, point of Care, VExUS, management*

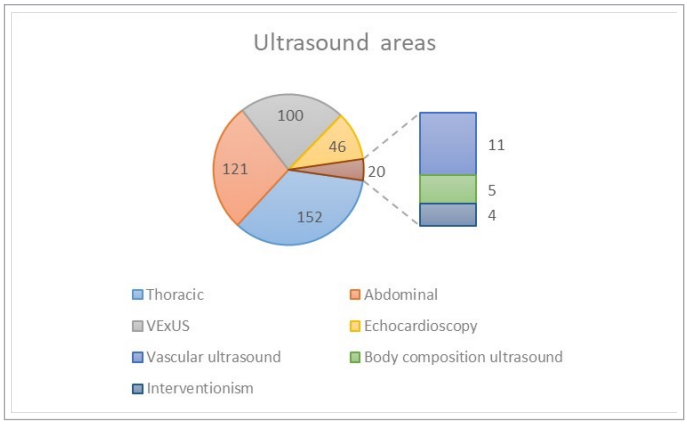

Figure 1. Performed point of care ultrasound areas.

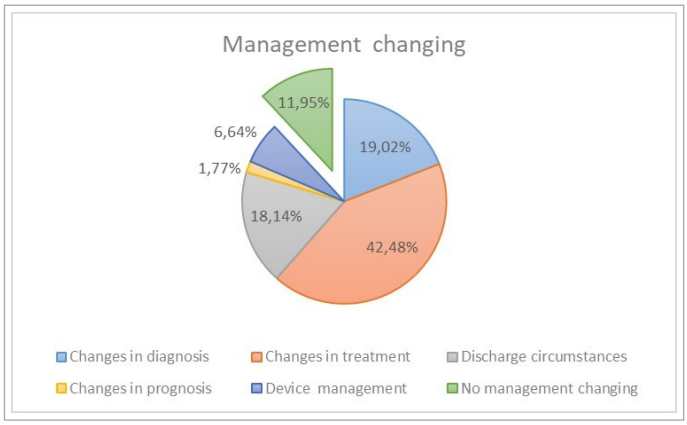

Figure 2. Management changing according to investigators. Pacient´s management changed in 88.05% of cases. Didn´t change in 11.95%.

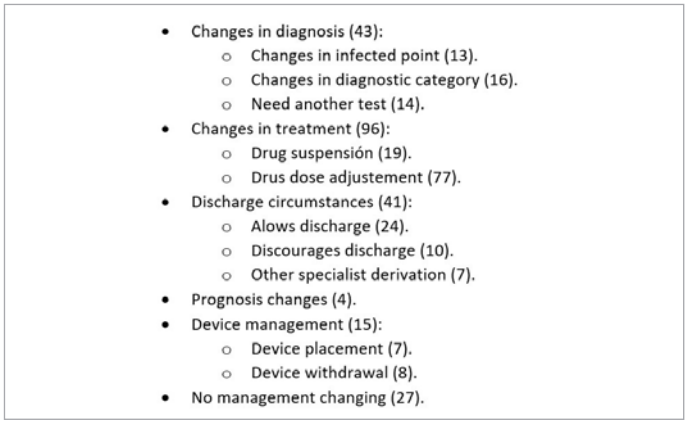

Figure 3. Summary of management changing.

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[Abstract:0316]

POCUS IN THE HOSPITAL-AT-HOME SETTING

Ana Sofía Romero León[1], Candela González San Narciso[1], Anthony Gurjian Arena[1], Ana María Aldea Gamarra[1], Jesús San Román De Lucas[1], Víctor González Ramallo[1], Lucía Ordieres Ortega[1], Almudena Marcelo Ayala[1]

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Summary: Various studies demonstrate the importance of Point Of Care Ultrasound (POCUS) and Hospital at Home Units.

Purpose: To assess the benefits of POCUS in a Hospital-at-Home setting, due to the scarce evidence in this modality of patient care.

Methods: A retrospective and descriptive, collecting clinical and demographic data from patients subjected to POCUS in the Hospital-at-Home unit of a tertiary hospital from April to May 2023.

Findings: POCUS was performed (Figure 1) in 35 patients, with an average age of 77 years (range 47-99), 54.3% of them being female. The chief reason for admission were infections (46%), mainly of urinary and respiratory origins, and heart failure (23%). 91.4% of the ultrasounds were carried out by a supervised medical resident, 25,7% of them purely for learning purposes. Pathologic findings were observed in 57% of the ultrasounds performed, leading to a change in management in 51.4% of those patients.

Conclusions: POCUS is nowadays an essential tool in daily practice, contributing to physical examination and diagnosis, even though it cannot substitute standard radiologic imaging. In the Hospital-at-Home setting the limited availability of standard imaging tests leads to a greater relevance of POCUS. Our data shows the significance of the integration of POCUS at Hospital-at-Home units.

Keywords: *hospital-at-home, POCUS, teaching*

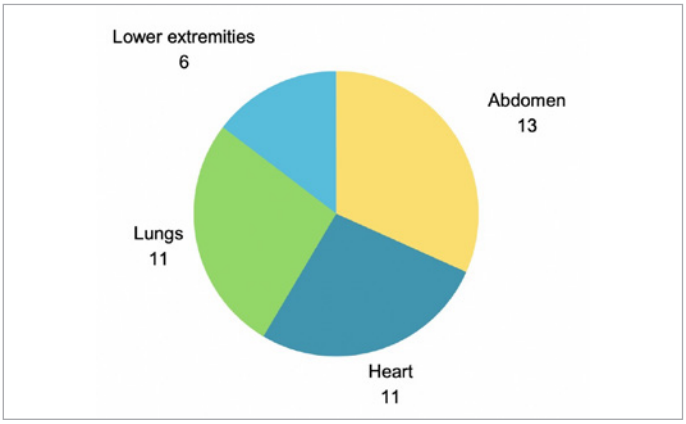

Figure 1. *Distribution of the ultrasounds carried out at the Hospital-at-Home unit according to the area of the body explored.*

[Abstract:0350]

A WEIGHT ON THE HEAD

Patrícia Torrens Vasconcelos

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Objective and Importance: Presentation of a case of giant angiomyofibroma located in the skull due to its rarity and exuberance.

Case Presentation: I present the case of an 80-year-old man with a history of arterial hypertension who presents a large expansive lesion located in the left frontoparietal region of the skull (Figure 1) with approximately 2 years of evolution, with intra and extracranial extension (Figure 2) and whose intracranial component exerts a significant compressive effect on the brain parenchyma with a shift of the midline structures to the right. Due to the presence of areas of subcutaneous liquefaction and sites of spontaneous drainage of mucopurulent secretions, an infectious process was assumed and he underwent neurosurgical intervention for radical resection of the lesion (Weight +/- 2kg). Intraoperatively, he presented severe bleeding requiring multiple blood transfusions. In the Intensive Care Unit he progressed unfavorably, ending up dying after 15 days from septic shock. The anatomopathological and immunohistochemical results revealed that it was an angiomyofibroma.

Conclusions: Angiomyofibromas are rare and benign tumors, however, depending on the location, they can exhibit extremely aggressive behavior with extension and destruction of adjacent tissues, as described in the present case.

Keywords: *angiomyofibroma, skull, benign tumors*

Figure 1. *Angiomyofibroma: extracranial extension.*

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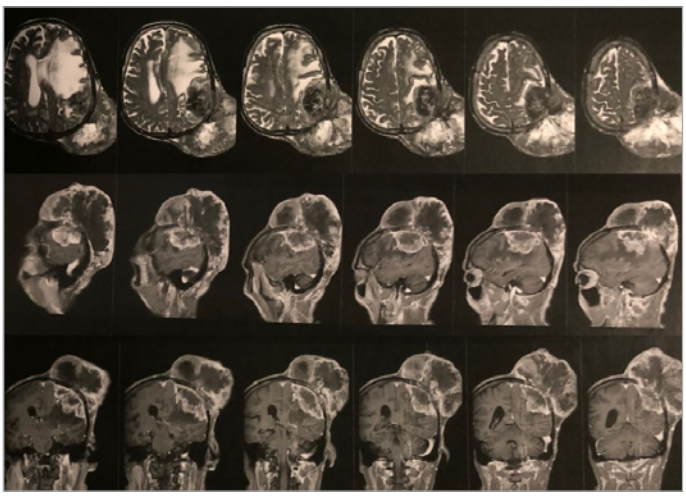

Figure 2. Intra and extracranial component of angiomyofibroma (Cranial magnetic resonance).

Reference list:
1.McGovern BH. The epidemiology, natural history and prevention of hepatitis B: implications of HIV co-infection. Antivir Ther 2007; 12 (Suppl 3): H3–H13
2.https://www.cdc.gov/hiv/library/index.html

Keywords: hepatitis B virus (HBV), human immunodeficiency virus (HIV), Co-infection, Treponema pallidum (Syphilis)

[Abstract:0351]

INVESTIGATION OF HIV/HBV/SYPHILIS CO-INFECTION AND LABORATORY RESULTS

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HIV infection affects more than 38 million people in the world. Approximately 1.5 million new HIV infections were reported in 2021. The study aims to HIV-positive patients of evaluating the HIV/HBV/Syphilis prevalence and LFT.

In our study, between 1 January 2018 and 1 August 2023 applicant, the serum 119 HIV-positive patients verified was retrospectively evaluated. Demographic information, data on TPHA, ALT, AST, and ALP levels were examined. were evaluated in terms of HIV/HBV/syphilis co-infection. All HIV-positive cases were found to be HIV-1. The frequency of HIV/HBV co-infection was seen as 5.04%. Median ALT: 65.8U/L, AST: 57.4U/L, TPHA 1/320 and age range was determined as 37.3. It was reported that the ALT and AST levels of 1 serum in which HIV/HBV and HDV co-infection was detected were twice the normal.

This suggests that liver damage may be more severe in HIV/HBV/HDV co-infection. HIV/Syphilis co-infection was detected in 5.04% of patients. HIV/HBV/Syphilis co-infection was detected in only 1 of these samples. It was determined that the main mechanism responsible for transmission in coinfected patients was the common transmission route. When examined by gender, HIV positivity was found to be higher in men with 95.7% (n=114). No significant increase was detected in ALP levels. The protective role of the vaccine against HBV is clear. We believe that the vaccine that can be developed for HIV is promising.

[Abstract:0433]

INTOXICATIONS IN AN INTERNAL MEDICINE SERVICE

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Servico de Medicina Interna, Hospital de Faro, Centro Hospitalar Universitário do Algarve, Faro, Portugal

This retrospective observational study aimed to characterize hospitalizations for drug intoxication and toxic effects of non-medicinal substances in the Internal Medicine Service between 2017 and 2021. Out of 7375 patients admitted to Internal Medicine, 42 (0.57%) were due to intoxication. The majority were voluntary cases, primarily involving benzodiazepines (19.05% due to suicidal ideation), with a higher prevalence in females (71.44%). ICU admissions were low (23.81%), likely influenced by the advanced age and comorbidities of patients. Notably, 43.23% had a Glasgow Coma Scale ≤ 8 on admission, with 7 requiring invasive mechanical ventilation in ICU. Treatment included gastric lavages, fluid therapy, antagonists, and antibiotics. Despite the majority being autonomous on admission, 9.53% died, and 71.43% had no sequelae at discharge. Only 4.76% were transferred to Psychiatry. The small number of ICU admissions may be attributed to the effectiveness of antidotes and support from Internal Medicine. In conclusion, voluntary benzodiazepine ingestion was the primary cause of intoxication, more common in females, with low ICU admissions and favorable outcomes, indicating the efficacy of Internal Medicine in managing these cases.

Keywords: intoxication, drugs, voluntary, involuntary

 DOI: 10.12890/2024_V11Sup1

Table 1. Intoxication table.

Between 2017 and 2021, 7375 patients were admitted to an Internal Medicine Service, of which 42 (0.57%) were due to drug and other non-medicinal chemical intoxication. There were 12 men (28.56%) and 30 women (71.44%). The average age was 69 years. Ten (23.81%) were admitted to ICU/ICU. The majority were voluntarily intoxicated with Benzodiazepines due to suicidal ideation (19.05%). Twenty (47.61%) were accidental intoxications, and 22 (52.38%) were voluntary intoxications. Upon admission, 19 (43.23%) patients had GCS ≤ 8, and 7 required invasive mechanical ventilation in ICU. Nine gastric lavages were performed. Treatment included fluid therapy, antagonists, and antibiotic therapy. Ten patients (23.81%) developed aspiration pneumonitis. Twenty-two (52.38%) had psychiatric histories. Twenty-six (61.90%) were evaluated by psychiatry, and 2 (4.76%) were transferred to the Psychiatry Service. The average length of hospital stay and in Internal Medicine was similar (+/-11 days). Upon admission, 30 (71.43%) were autonomous, and at discharge, 30 had no sequelae. Four patients (9.53%) died.

[Abstract:0452]

SYSTEMATIC REVIEW USING THE CASPE TOOL ON THE EFFECTIVENESS OF NALFEMENE FOR ALCOHOL DEPENDENCE

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[3] Internal Medicine Department, Complejo Hospitalario Universitario Nuestra Señora de La Candelaria, Santa Cruz de Tenerife, Spain

Purpose: A large proportion of patients in abstinence-oriented treatment experience relapses. Therefore, in 2013 the EMA approves nalmefene to reduce alcohol consumption in patients with alcohol dependence. Our aim is to conduct a systematic review of randomised double-blind clinical trials to critically assess their design and outcomes.

Methods: We use the CASPe critical reading tool for randomised double-blind clinical trials published to date. We searched in Pubmed, finding 8 studies that fulfilled the requirements.

Findings: None of the 8 clinical trials analysed successfully pass all the critical reading questions, with three of them being the only three to fail in only one question. The failure in this question is common to all the articles and refers to the inclusion criteria of the trials, being very restrictive in all cases and excluding patients with comorbidities such as psychiatric or hepatic comorbidities. nalmefene is shown to be effective and safe in reducing alcohol consumption in patients with a high-risk level of alcohol use. Further studies on the cost-effectiveness of this treatment, focused on the reduction of alcohol consumption as a therapeutic objective are needed.

Conclusions: The use of nalmefene appears to be effective and safe for the reduction of alcohol consumption in patients with alcohol dependence. However, clinical trials including patients with psychiatric and hepatic comorbidities are needed. The definitive answer on the efficacy of the drug will depend on the demonstration that the strategy of reducing consumption will reduce the harmful effects of dependence.

Keywords: *alcohol dependence, CASPe tool, systematic review*

PREGUNTA (→)	1	2	3	4	5	6	7	8	9	10	AÑO	TÍTULO
1											1994	MASON
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3											2004	ANTON
4											2007	KARHUVAARA
5											2013	ESENSE
6											2013	ESENSE 2
7											2014	SENSE
8											2019	MIYATA
ARTÍCULO (↑)												

Figure 1. CASPe.

[Abstract:0605]

A QUALITY IMPROVEMENT PROJECT ON THE EFFECTIVENESS OF THE ACUTE MEDICINE TEACHING AT HINCHINGBROOKE HOSPITAL IN 2023

Harith Altemimi, Shahbaz Javed, Mallika Fonseca

Department of Medicine, Hinchingbrooke Hospital, Huntingdon, UK

As the UK government introduces changes in medical training, the fallacies and subsequent need for improvement in current methods of post-graduate medical training are under scrutiny.

At Hinchingrooke Hospital, we examined the teaching programme in the Acute Medicine Department and been changes based on the feedback received.

The third cycle of a quality improvement project focused on these lunchtime sessions used a similar PDSA method to the previous cycles, including three new aims, 1) provide clear objectives for scope of teaching; 2) use a variety of approaches to engage learners; 3) upskill the presenters of the sessions (Figure 1).

We found an increase in the number of strong positive responses toward the original aims, with an equally positive response toward the speaker having clear objectives. However, it was noted that there was a wide variety of responses regarding time-

 DOI: 10.12890/2024_V11Sup1

keeping, with a dip in positive responses from the last cycle. We identified a number of strengths, including the ability to provide a multidisciplinary teaching environment, the value of the sessions in avoiding future clinical errors, the relevance of the content to the curriculum and its varied teaching design (Figure 2,3). We also conscious that the teaching needs to be focused within time limits. We intend to continue running this programme and monitoring its quality and will be running a feedback form for the speakers as well for the next cycle where we include markers such as speaker satisfaction and organisational clarity to assess the quality of the teaching sessions.

Keywords: *teaching session, acute medicine, training programme*

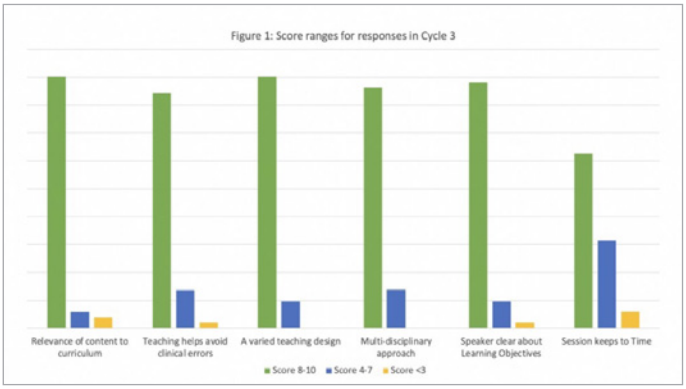

Figure 1. *Score ranges for responses in Cycle 3.*

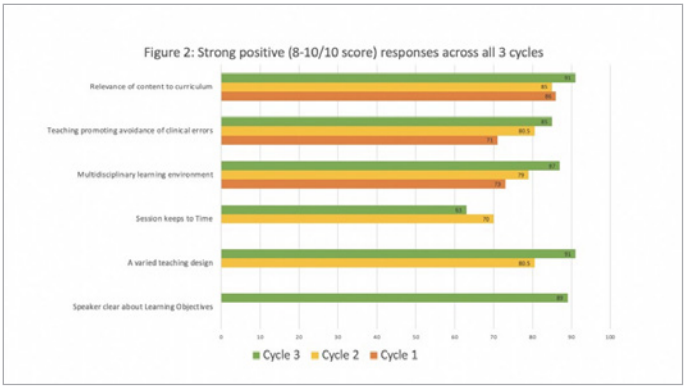

Figure 2. *Strong positive (8-10/10 score) responses across all 3 cycles.*

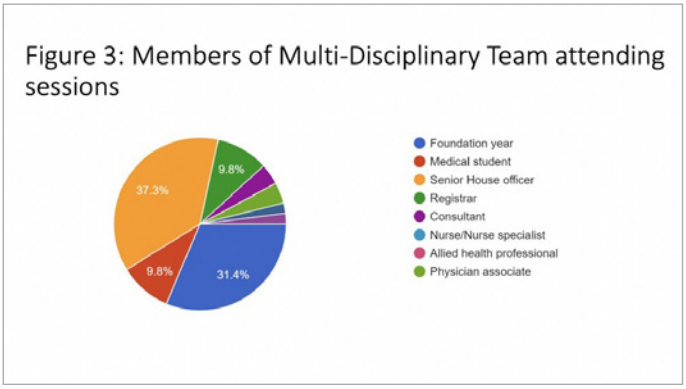

Figure 3. *Members of the Multi-Disciplinary Team attending sessions.*

[Abstract:0670]

CHARACTERIZING INFERIOR VENA CAVA FILTER REMOVAL: INDICATIONS, COMPLICATIONS, AND TIMELINESS IN A SECOND-LEVEL MEDICAL CENTER

María Martin Ampuero, Paula García Duque, Claudia Beatriz Pérez González, Paula Martínez De La Cruz, Jesús Ignacio Collado Álvarez, Gregorio Palacios, Cristina Garmendia Fernández

Department of Internal Medicine, Fundación Alcorcón University Hospital, Alcorcón, Spain.

Objective: This study aimed to characterize the rate and timing of inferior vena cava filter (IVCF) removal in patients with thromboembolic disease at a second-level medical center. Additionally, indications for IVCF placement and the occurrence of associated complications were examined.

Methods: Conducted as a retrospective observational study, the investigation included all patients who underwent Option model IVC filter implantation from January 1, 2014, to December 31, 2022. Follow-up assessments were performed six months post-implantation.

Results: The study encompassed 85 patients, with the most common indications for IVCF placement being uncontrollable bleeding (41.7%) and urgent non-deferrable surgery (38.1%) (fig.1). Of the implanted devices, 54.1% were not removed, primarily due to unspecified reasons (39.1%), persisting contraindications for anticoagulation (21.7%), technical challenges (15.2%), and death (23.9%) (fig.2). Only 37 devices were removed within the manufacturer's recommended timeframe. Complications included one inferior vena cava perforation and two cases of deep vein thrombosis. Seven deaths occurred within a month post-IVCF placement, with six unrelated to the intervention.

Discussion and Conclusions: The study concludes that IVCF removal is generally indicated, except in cases where contraindications to anticoagulation persist or technical challenges prevent removal. The observed rate of unremoved devices in the center exceeded literature estimates of 12-45%. However, the complication rate may be underestimated due to the study's small sample size and asymptomatic complications. The importance of timely IVCF removal is underscored, necessitating vigilant patient follow-up. The study advocates for more real-life investigations to further elucidate the complexities surrounding IVCF utilization and removal.

Keywords: *inferior vena cava filter, removal, complications, venous thromboembolism.*

Placement indication	Number	Percentage
Uncontrollable bleeding	35	41,7%
Urgent or non-deferrable surgery	32	38,1%
High risk of bleeding (coagulopathy, thrombocytopenia, intracranial hemorrhage, or intracranial injury with a risk of bleeding)	10	10,7%
Recurrent pulmonary embolism	2	2,4%
Large thrombotic burden or floating thrombus	2	2,4%
Prior to thrombectomy	4	4,8%

Figure 1. *Placement indication.*

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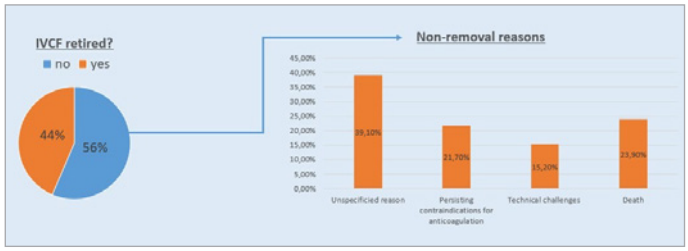

Figure 2. Rates and non-removal reasons.

[Abstract:0675]

THORACIC SPLENOSIS: THE LUCKIEST NODULE YOU CAN HAVE

Marta Mello Vieira, Sara Barbosa, Mª Do Carmo Fevereiro, Teresa Souto Moura, Isabel Germano, Paula Fonseca

Hospital de São José, Lisboa, Portugal

A 61-year-old woman, with type-2 diabetes, hypothyroidism, and a car accident 36-years prior, arrived at the emergency department with a 1-week history of cough and dyspnoea. A chest X-ray showed a nodule on the lateral region of the left lung and a chest computed tomography (CT) confirmed nodular thickening of the left pleura (11 cm extension, 2.9 cm thickness), suggestive of mesothelioma or lung neoplasia. Initial studies included: mammary ultrasound and abdomin-pelvic CT (no relevant changes); search of acid-fast-bacilli on gastric aspirate (negative); percutaneous pleural biopsy (lymphoid tissue and abundant macrophages). Follow-up chest CTs 2 and 5 months after discharge showed stability of the nodule; positron emission tomography only identified low metabolic signal on the left pleura. The patient was re-biopsied by video-assisted thoracoscopy which revealed, once again, fragments of lymphoid tissue with germinative centres and abundant CD68+ macrophages. After multi-disciplinary discussion, the hypothesis of thoracic splenosis was considered the most likely, given the patient medical history.

Thoracic splenosis is characterized by the presence of ectopic splenic tissue inside the thoracic cavity, due to traumatic rupture of the spleen. It occurs in approximately 18% of patients after a splenic insult and it is usually asymptomatic and discovered on average 21-years after the insult. In fact, the patient had had a car accident 36-year earlier, that resulted in multiple fractured ribs and in need of a splenectomy. This case brings our attention to this rare entity, highlighting the importance of a detailed clinical history, persistent search of a diagnosis and a multi-disciplinary approach.

Keywords: thoracic splenosis, pleural nodule, pleural biopsy, splenectomy

[Abstract:0718]

LONGITUDINAL STUDY OF NLR (NEUTROPHIL/LYMPHOCYTE RATIO) FOR THE PERIOD 2019-2022

Athanasia Sergounioti[1], Dimitrios Rigas[2], Afroditi Tsiviki[3], Efstathios Alonaris[4], Dimitrios Kontogiannis[3], Christos Kakkanas[3]

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Introduction: Neutrophil-to-Lymphocyte Ratio (NLR) is widely used in almost all fields of medical science as a reliable and readily available biomarker of immune response to various infectious and non-infectious stimuli.

Aim: The longitudinal study of the levels of NLR in the general population of the Regional Unit of Fokis, during the period 2019-2022.

Materials and Methods: The study included 10075 individuals (5359/average age:52.3 years and 4716 women /average age:53.6 years), residents in the Regional Unit of Fokis, who were tested during the period 2019-2022. Data were retrieved from our laboratory's LIS system database. The NLR index was calculated using the mathematical formula NLR = neutrophil/lymphocyte where neutrophil: absolute number of neutrophils and lymphocyte: absolute number of lymphocytes. The average value of NLR for the entire sample population was calculated for each year. The statistical analysis of the data was performed with the statistical package SPSS v20.

Results: The average value of NLR per year is presented in Figure 1. We observed that the average value of NLR was higher in the year 2019 and in the beginning of 2020, whereas its level decreased in the years 2021 and 2022.

Conclusions: The decrease observed in the mean value of NLR could be attributed to the reduction of the spread of communicable diseases, due to the lockdowns and the use of masks imposed in the context of the COVID-19 pandemic.

Keywords: neutrophil/Lymphocyte Ratio, lockdown, COVID-19

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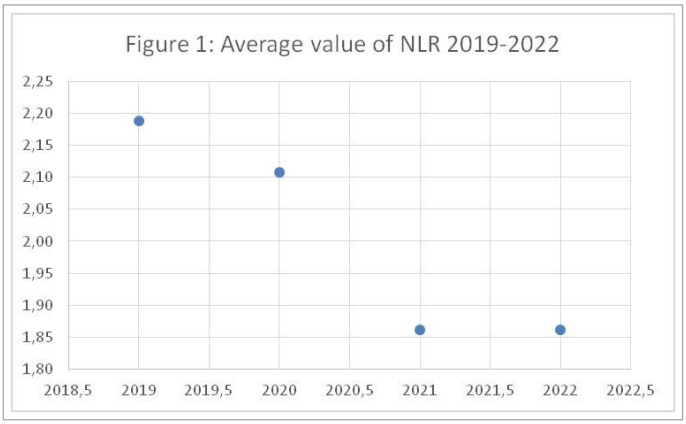

Figure 1.

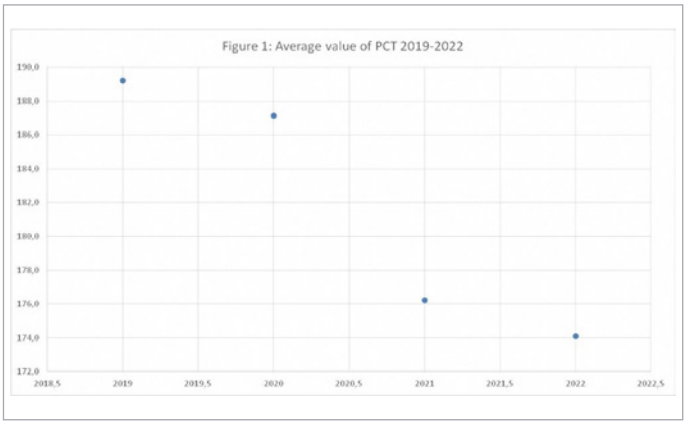

Figure 1.

[Abstract:0726]

LONGITUDINAL STUDY OF PCT (PLATELETCRIT) FOR THE PERIOD 2019-2022

Athanasia Sergounioti[1], Michalis Konstantinidis[2], Dimitrios Rigas[3], Konstantinos Stavridis[2], Afroditi Tsiviki[2], Vasileios Zoitopoulos[1]

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Introduction: Plateletcrit (PCT) is a parameter of the Complete Blood Count and is defined as the volume occupied by platelets in the blood as a percentage. Recent studies indicate the potential utility of PCT as a biomarker of inflammation.

Aim: The longitudinal study of PCT in the general population of the Regional Unit of Fokis, during the period 2019-2022.

Materials and Methods: The study included 10075 individuals (5359/average age: 52.3 years and 4716 women/average age: 53.6 years), residents of the Regional Unit of Fokis, who were tested during the period 2019-2022. Data were retrieved from our laboratory's LIS system database. The PCT index was retrieved from the Complete Blood Counts of the study population. The average value of PCT for the entire sample population was calculated for each year. The statistical analysis of the data was performed with the statistical package SPSS v20.

Results: The average value of PCT per year is presented in Figure 1. We observed that the average value of PCT was higher in the year 2019 and the beginning of 2020, whereas its levels decreased considerably in the years 2021 and 2022.

Conclusions: The decrease in PCT levels could possibly be attributed to limiting the spread of communicable diseases, due to the lockdowns and mask use imposed in the context of the COVID-19 pandemic.

Keywords: PCT, lockdown, COVID-19

[Abstract:0729]

LONGITUDINAL STUDY OF PLR (PLATELET/ LYMPHOCYTE RATIO) FOR THE PERIOD 2019-2022

Dimitrios Rigas[1], Michalis Konstantinidis[2], Afroditi Tsiviki[2], Efstathios Alonaris[3], Konstantinos Stavridis[2], Athanasia Sergounioti[4]

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Introduction: Platelet-to-Lymphocyte Ratio (PLR) is a novel marker of inflammation, which is cost-effective and readily available. PLR has been used in various diseases, such as cardiovascular diseases and autoimmune diseases, as a predictor of inflammation and mortality.

Aim: The longitudinal study of the levels of PLR in the general population of the Regional Unit of Fokis, during the period 2019-2022.

Materials and Methods: The study included 10075 individuals (5359/average age: 52.3 years and 4716 women/average age: 53.6 years), residents of the Regional Unit of Fokis, who were tested during the period 2019-2022.

Data were retrieved from our laboratory's LIS system database. The PLR index was calculated using the mathematical formula PLR = platelet/lymphocyte where platelet: platelet count and lymphocyte: absolute lymphocyte count. The average value of PLR for the entire sample population was calculated for each year. The statistical analysis of the data was performed with the statistical package SPSS v20.

Results: The average value of PLR per year is presented in Figure 1. We observed that the average value of PLR was higher in the year 2019 and in the beginning of 2020, whereas its level decreased slightly in the years 2021 and 2022.

Conclusions: The decrease observed in the mean value of PLR could be attributed to the reduction of the spread of communicable

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diseases, due to the lockdowns and the use of masks imposed in the context of the COVID-19 pandemic.

Keywords: *PLR, lockdown, COVID-19*

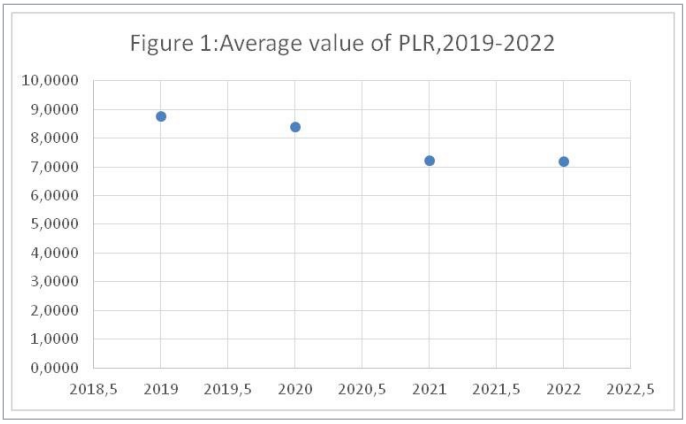

Figure 1.

[Abstract:0731]

LONGITUDINAL STUDY OF SII (SYSTEMIC IMMUNE - INFLAMMATION INDEX) FOR THE PERIOD 2019-2022

Dimitrios Rigas[1], Konstantinos Stavridis[2], Michalis Konstantinidis[2], Efstathios Alonaris[3], Afroditi Tsiviki[2], Athanasia Sergounioti[4]

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Introduction: The SII index (Systemic Immune-Inflammation Index) is considered to adequately reflect the balance between inflammation and the patient's immune status and is used for the prognosis and assessment of mortality for various pathological conditions, such as cardiovascular diseases, various neoplasms, etc.

Aim: The longitudinal study of the levels of SII in the general population of the Regional Unit of Fokis, during the period 2019-2022.

Materials and Methods: The study included 10075 individuals (5359/average age: 52.3 years and 4716 women/average age: 53.6 years), residents of the Regional Unit of Fokis, who were tested during the period 2019-2022. Data were retrieved from our laboratory's LIS system database. The SII index was calculated using the mathematical formula SII = platelet x neutrophil/lymphocyte where platelet: platelet count, neutrophil: absolute neutrophil count and lymphocyte: absolute lymphocyte count. The average value of SII for the entire sample population was calculated for each year. The statistical analysis of the data was performed with the statistical package SPSS v20.

Results: The average value of SII per year is presented in Figure 1. We observed that the average value of SII was higher in the year 2019 and in the beginning of 2020, whereas its level decreased slightly in the years 2021 and 2022.

Conclusions: The decrease observed in the mean value of SII could be attributed to the reduction of the spread of communicable diseases, due to the lockdowns and the use of masks imposed in the context of the COVID-19 pandemic.

Keywords: *SII, lockdown, COVID-19*

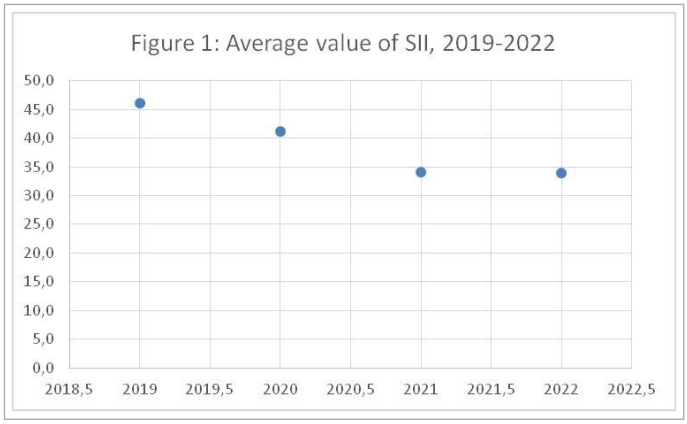

Figure 1.

[Abstract:0734]

THE NEUROIMMUNE ROLE OF THE GUT MICROBIOME-BRAIN AXIS

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Introduction: The gut microbiome (GM) has been shown to play an important role in host physiology. Recent research suggests that it may influence the physiology and inflammatory status of the central nervous system (CNS). The CNS and the gastrointestinal tract communicate through a of a complex, bidirectional system of signalling pathways including the vagus nerve, the immune system, and products of bacterial metabolism. This bidirectional communication pathway between EM and brain is called the gut microbiome-brain axis (GMBA).

Background: Gut dysbiosis is associated not only with gastrointestinal disorders but also with diseases affecting other, distant organs. Since GM determines the level of activation of the hypothalamic-pituitary axis through the production of neuroimmunological mediators, it is expected that during dysbiosis, the GMBA pathways are dysregulated, resulting

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in changes in the permeability of the blood-brain barrier and consequent neuroinflammation. The exact mechanisms remain unclear, however the activation of the inflammasome by GM seems to be involved in the pathogenesis of multiple sclerosis, Alzheimer's and Parkinson's diseases, as well as in anxiety/depressive disorders tumours are also hypothesized to be affected in their initiation or progression by GM through immune system modifications, genotoxic effects (induced by GM) or changes in signalling/proliferation pathways.

Conclusions: The gut microbiome-brain axis is a promising field of research for the understanding and treatment of many diseases. To date, the design and testing of therapeutic intervention strategies targeting GM are underway, such as faecal microbiome transplantation for multiple sclerosis and Parkinson's disease, modification of GM by using antibiotics for tumour control (e.g., administration of clofoctol in glioma) or by administration of probiotics and/or prebiotics (synbiotics) or metabiotics which exert a neuroprotective role and induce neuroplasticity.

Keywords: *gut microbiome, gut -brain axis, neuroimmunology*

[Abstract:0737]

STUDY OF SEASONALITY AND METEOROLOGICAL PARAMETERS AFFECTING THE NEUTROPHIL-TO-LYMPHOCYTE RATIO (NLR)

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Introduction: The NLR (Neutrophil-to-Lympocyte Ratio) is a novel biomarker that is proposed as an alternative to evaluate the inflammation status of the body.

Aim: The study of NLR in relation to demographic factors, seasonal and meteorological variables.

Materials and Methods: The study included 10075 individuals (5359 men with an average age of 52.3 years/4716 women with an average age of 53.6 years), residents in the Regional unit of Fokis, who were tested during the period 2019-2022. The data were retrieved from the database of the LIS system of our laboratory. The meteorological data were obtained from the meteorological station of the National Observatory of Athens in Amfissa. The parameters examined are: gender, age, year, month, wind speed, average daily temperature, maximum daily relative humidity, apparent temperature (Apparent Temperature-AT) and the average apparent temperature over the last 3, 5 and 7 days (AT3, AT5 and AT7, respectively). The NLR index was calculated using the mathematical formula: NLR=Neutrophil/Lymphocyte where neutrophil: absolute neutrophil count and lymphocyte: absolute lymphocyte count. The statistical analysis of the data was done with the statistical package SPSS v20.

Results: The statistical processing of the collected data was done with descriptive statistics methods (Figure 1) and linear regression (Table 1).

Conclusions: The values of NLR were higher during the coldest periods of the year. It is worth noting the abrupt change in NLR values between the months of August and September, a fact that could be attributed to the difference in the average temperature of these months.

Keywords: *NLR, average temperature, seasonality*

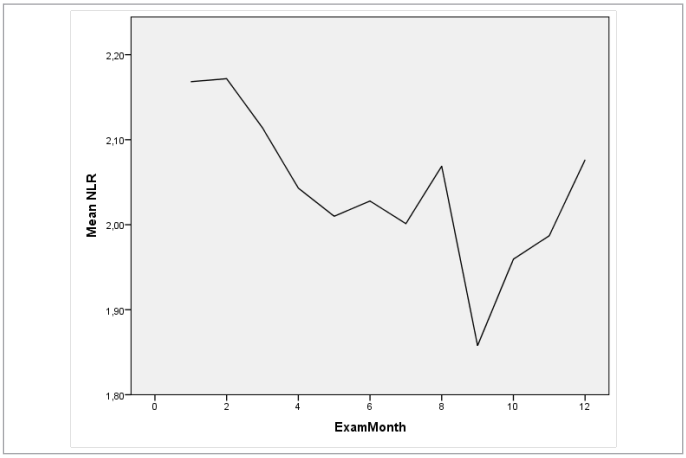

Figure 1.

Table 1.

[Abstract:0740]

3D MOTION CORRECTED MRI OF THE FETAL CARDIOVASCULAR SYSTEM

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Purpose: Fetal Magnetic Resonance Imaging (MRI) is vital for detecting congenital defects like brain anomalies. Slice-to-Volume Reconstruction (SVR) captures moving organs, like the heart, through snapshot images. Deformable Slice-to-Volume

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Reconstruction (DSVR), a novel technique similar to SVR, adjusts 2D slices based on a baseline, enhancing precision. This study compares DSVR and SVR as adjuncts in diagnosing congenital cardiac abnormalities.

Methods: Participants provided written consent before being recruited to a long-running fetal imaging study [REC 07/H0707/105]. Measurements of the descending aorta's diameter were taken twice (a week apart) to allow for intra-observer variability. The chosen ellipse shape allowed deformity consideration. Alignment in sagittal and coronal planes ensured accurate measurements perpendicular to the vessel. SVR and DSVR volumes were measured for the same patients.

Findings: Ten patients with singleton pregnancies and known/suspected fetal heart defects were included from October 24 to November 22, 2019. Mean gestational age was 32 weeks. Two patients were excluded due to scan issues and incomplete consent. For the first set of means, the p-value was 0.235; for the second set a week later, the p-value was 0.513.

Conclusions: The study found no statistically significant difference in means, possibly due to the small sample size. Currently, there isn't enough evidence to assert DSVR's reliability or superiority over SVR. Further extensive research is needed for conclusive results, emphasising the importance of larger sample sizes in future studies.

Keywords: *paediatric cardiology, fetal MRI, congenital abnormalities*

[Abstract:0741]

STUDY OF SEASONALITY AND METEOROLOGICAL PARAMETERS AFFECTING THE PLATELET-TO-LYMPHOCYTE RATIO (PLR)

Dimitrios Rigas[1], *Konstantinos Stavridis*[2], *Michalis Konstantinidis*[2], *Efstathios Alonaris*[3], *Vassiliki Sotiria Kyfonidi*[4], *Athanasia Sergounioti*[4]

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[4] Medical Laboratory Department, General Hospital of Amfissa, Amfissa, Greece

Introduction: The PLR (Platelet-to-Lymphocyte Ratio) is a novel biomarker that is proposed to assess inflammation levels in a wide variety of pathological conditions, such as cardiovascular diseases, various neoplasms, inflammatory bowel disease, etc.

Aim: The study of PLR in relation to demographic factors, seasonal and meteorological variables.

Materials and Methods: The study included 10075 individuals (5359 men/average age 52.3 years and 4716 women/average age 53.6 years), residents of Regional unit of Fokis, who were tested during the period 2019-2022. The data were retrieved from the database of the LIS system of our laboratory. The meteorological data were obtained from the meteorological station of the National Observatory of Athens in Amfissa. The parameters examined were: gender, age, year, month, wind speed, average daily temperature, maximum daily relative humidity, apparent temperature (Apparent Temperature-AT) and the average apparent temperature over the last 3, 5 and 7 days (AT3, AT5 and AT7, respectively). The PLR index was calculated using the mathematical formula: PLR=Platelet/Lymphocyte where platelet was platelet count and lymphocyte was absolute lymphocyte count. The statistical analysis of the data was done with the statistical package SPSS v20.

Results: The statistical processing of the collected data was done with descriptive statistics methods (Figure 1) and linear regression (Table 1).

Conclusions: From Figure 1, we observed that PLR increases during winter, and then, in the midst of a downward trend, showed a sharp increase in April. Subsequently, it returned to its downward trend, reaching its lowest levels in September, and then, it followed an upward trend again. From Table 1, it appeared that AT7 is the meteorological parameter that satisfactorily predicts the PLR values is ($p<0.01$). The potential relationship of PLR changes with epidemiological, environmental and meteorological factors remains to be further investigated.

Keywords: *PLR, weather, AT7*

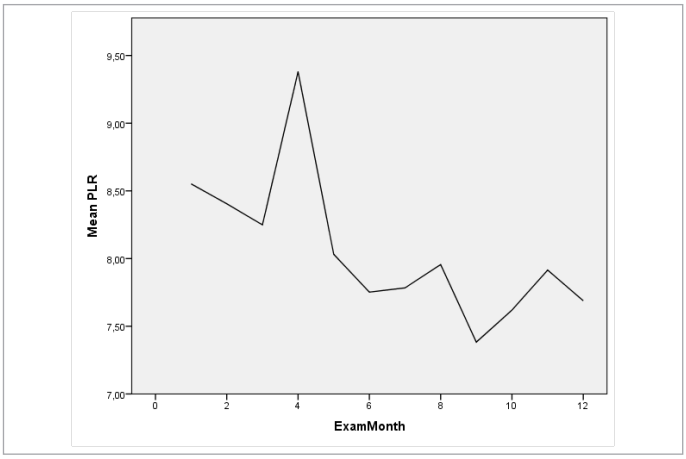

Figure 1.

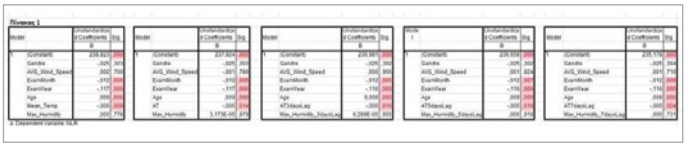

Table 1.

DOI: 10.12890/2024_V11Sup1

[Abstract:0781]

MISFORTUNES NEVER COME ALONE

Anamaria Draghici[1], *Andreea Codruta Usurelu*[2], *Larisa Pinte*[1], *Cristian Baicus*[1]

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Summary: This case study addresses the coexistence of syphilitic aortitis and secondary amyloidosis, rare conditions causing inflammation and abnormal protein accumulation in organs.

Purpose: It aims to outline the intricate relationship between the two conditions, emphasizing the diagnostic challenges and clinical implications encountered during the management of the patient.

Methods: We report the case of a 69 years old woman, previously known with many cardiovascular risk factors and iron-deficiency anemia with no bleeding source, who presented in our department for further investigations. She also reported thoracolumbar pain radiating to the flanks. The diagnostic process involved laboratory tests for infectious and autoimmune diseases, CT scan, renal biopsy, echocardiography, all described below.

Findings: Laboratory findings showed inflammatory syndrome and a CT scan identified prominent aortitis (see attached Figure) affecting the ascending and descending aorta, extending to the common iliac arteries. Various diagnoses were considered. Infectious causes included negative serologies for hepatitis and HIV, but elevated TPHA and VDRL, the patient revealing a 20-year history of untreated syphilis. Tertiary syphilis suspicion led to ceftriaxone treatment. Also, corticosteroid therapy was initiated with effective reduction of inflammation. Autoimmune causes were also explored, yet all specific tests were negative. Moreover, laboratory tests identified increasing subnephrotic proteinuria with normal renal function. Renal biopsy revealed amyloidosis. Similarly, echocardiography suggested a restrictive pattern which could indicate cardiac involvement. These findings were attributed to preexistent inflammation.

Conclusions: This case underlines the complexity of coexisting aortitis and secondary amyloidosis, highlighting the challenges in diagnosis and management.

Keywords: *aortitis, secondary amyloidosis, tertiary syphilis*

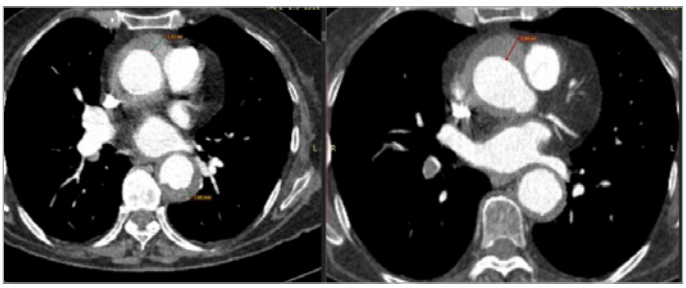

Figure 1. *CT scan revealing aortitis.*

[Abstract:0829]

SLEEP QUALITY AND FOOD ADDICTION ACROSS YEARS IN TRAINING AMONG INTERNAL MEDICINE RESIDENTS

Ece Ornek, Ilker Tasci

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Introduction: Internal medicine (IM) training requires strong commitment and effort. Daily performance and sleep quality (SQ) are interrelated. SQ also adversely affects food consumption. This study examined the SQ, food addiction (FA) and their relationship with years in training among IM residents.

Materials and Methods: A cross-sectional study was performed to investigate the association between SQ, FA and overweight/obesity at a tertiary center, Gulhane Training and Research Hospital, Turkiye. The current sample included the analysis of participants who were IM residents. SQ and FA were assessed with the Pittsburgh Sleep Quality Index (PSQI) and the Yale Food Addiction Scale (YFAS) version 2.0, respectively. The main outcome was the SQ and FA levels across four years of training.

Results: There were 43 residents (age, mean±SD: 29.4±3.2 years, women: 58.1%) of 1st (n=5, 11.6%), 2nd (n=12, 27.9%), 3rd (n=13, 30.2%) and 4th (n=13, 30.2%) years. SQ was overall poorer than the general population by 65.1% and showed no difference across of years (1st to 4th years; 80.0%, 66.7%, 76.9% and 46.2%, p=0.340). FA was also more common than the general population by 34.9% and showed no difference across of years of training (1st to 4th years; 40.0%, 25.0%, 46.2% and 30.8%, p=0.706). No correlations were found between years of training and median PSQI (p=0.306) or YFAS scores (p=0.391).

Conclusions: The rates of poor SQ, and FA were higher than the general population among IM residents and were similar across years of training, suggesting a similar exhaustive workload during four years.

Keywords: *Sleep quality, food addiction, internal medicine, owerweight, obesity*

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[Abstract:0849]

BILIOCOLONIC FISTULA AND PNEUMOBILIA: ADENOCARCINOMA IN ETIOLOGY, A CASE AND LITERATURE REVIEW

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[2] Istanbul Acibadem Universitesi, Biyoistatistik ve biyoteknoloji Anabilim Dali, Istanbul, Turkey

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Cholecystoenteric fistula is a very uncommon complication of colonic tumors and many patients do not have a previous history suggestive of biliary pathology. We report a 72-year-old female with a past medical history of diabetes mellitus and hypertension presented in the emergency department (ED) with dyspnea requiring oxygen therapy on presentation. Her main complaints were cough and vomiting. Labs were suggestive of diabetic ketoacidosis (DKA). Computer tomography (CT) showed bilateral diffuse patchy airspace opacities. MPA management was started. During the follow-up the patient complained of abdominal distension, vomiting which was worsened during hospitalization. Diagnostic imaging and colonoscopy showed that his clinical presentation was due to cholecysto-enteric fistula and colonic mass. The treatment is mainly surgical and should be aimed primarily at the intestinal obstruction and secondarily at the cholecystoenteric fistula. As a result of the colonoscopy performed in our patient, it was understood that the tumor in the colon had invaded and formed a fistula. The pathology of the tumor was adenocarcinoma. We wanted to explain through this case that clinicians should keep in mind the possibility of a colon tumor in patients presenting with such cholecystitis findings.

Keywords: *fistula, pneumobilia, obstruction*

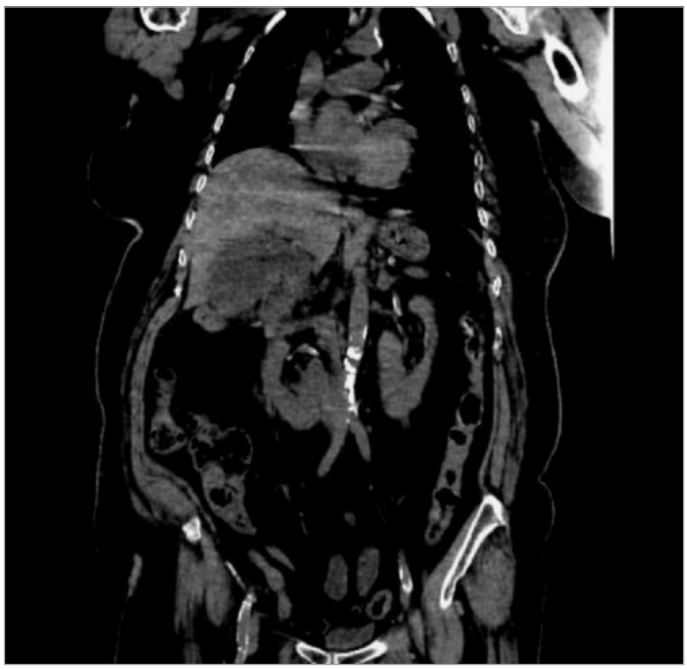

Figure 1. *Cholecystoenteric Fistule TOMOGRAPHY.*

[Abstract:0850]

DRESS SYNDROME, A COMPLICATION ENCOUNTERED IN THE TREATMENT OF CHRONIC KIDNEY DISEASE: A CASE REPORT AND LITERATURE REVIEW

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DRESS syndrome is a unique drug reaction characterized by rash, fever and multiorgan dysfunction. Mortality can reach 10%. In this case report and literature review, it is emphasized that patients receiving allopurinol should be cautious for drug reactions in the presence of hypotension, rash and progressive organ dysfunction. DRESS syndrome is a serious adverse drug reaction characterized by rash, fever, lymphadenopathy and single or multiple organ involvement. In our case, In the last 1 week, diffuse maculopapular rashes on erythematous ground, predominantly on the extremities, developed. 4 days ago, the patient called an ambulance due to hypotension and was advised to discontinue furosemid at control. Two weeks later, the patient was admitted to the emergency room again with complaints of swelling of the eyes, hypotension and increase in rash. Since the patient had a history of eating chestnut honey for the last week, a single dose of adrenaline was administered with a prediagnosis of anaphylaxis. The patient was found to have eosinophilia, facial edema and asthma. The patient was hospitalized considering DRESS syndrome due to allopurinol. Laboratory findings are urea 119 mg/dL, AST - 30 U/L, ALT - 47

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U/L, creatinine - 2.11 mg/dL, albumin - 28.6 g/L, potassium - 5. 3 mmol/L, WBC - 13.7 10^3/uL, HGB - 12.3 g/dL, EOS% - 34.6 %, EOS - 4.75 10^3/uL. On the second day of hospitalization, the erythema in the lesions started to fade. On the 4th day of prednol 70mg IV treatment, almost all of the lesions regressed.

Keywords: *DRESS syndrome, progressive organ dysfunction, allopurinol*

Medication	Common Symptoms
Lamotrigine	Fever and Toxic Epidermal Necrolysis (TEN)
Allopurinole	Organ dysfunction, A Generalized Rash and Eosinophilia that appear a few months after the start of treatment
Minocycline	Peripheral Adenopathies, Eosinophilia, Cardiac Dysfunction and Eosinophilic Pneumopathy
Abacavir	Gastrointestinal and Acute Viral Pneumonia-Like Symptoms that occur rapidly after starting treatment

Table 1. *Common medications may cause DRESS like semptoms.*

[Abstract:0853]

LIRAGLUTIDE IN THE THERAPEUTIC STRATEGY OF DIABETICS ON CORTICOSTEROIDS

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Internal Medicine Department, EPH Birtraria, Algiers

Introduction: GLP-1 analogues are indicated in patients with type 2 diabetes who have failed oral treatment. The effect of liraglutide on glycaemic control, weight loss and cardiovascular risk reduction is an advantage that offers promising prospects for patients.

Case Presentation: Female patient aged 40 years, BMI 34.22 kg/m^2 (obesity stage I), hypertensive, unbalanced type 2 diabetic on metformin and gliclazide, who presented a major imbalance in her diabetes after receiving high dose corticosteroid treatment for management of newly diagnosed Behcet's disease. This imbalance necessitated the initial introduction of high doses of insulin following a basal bolus regimen. After a week of insulin therapy, we introduced liraglutide, which enabled us to reduce the dose of rapid insulin until it was stopped, and to achieve blood glucose levels within the target range.

Conclusions: GLP-1 analogues represent a therapeutic class of hypoglycaemic agents with an original mechanism of action. Further studies on the positive impact of using liraglutide in patients with inflammatory diseases are needed to better understand the underlying mechanisms.

Keywords: *type 2 diabetes, systemic disease, corticosteroids, liraglutide*

[Abstract:0889]

WHEN A PULMONARY INFILTRATE IS NOT A COMMUNITY-ACQUIRED PNEUMONIA: A CASE REPORT

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Infliximab is a monoclonal chimeric IgG1 antibody, widely used for the treatment of many inflammatory, rheumatological and autoimmune diseases, including Crohn's disease.

The authors present the case of a 57-year-old male patient, with Crohn's disease, on infliximab therapy, admitted to the emergency department with dyspnoea, dry cough, and pleuritic chest pain. Upon examination, the patient had polypnea, and bilateral crackles at pulmonary auscultation. Arterial blood gas examination showed type 2 respiratory insufficiency (pO_2 58 mmHg). Diagnostic workup revealed moderately elevated white blood cell count, and C-reactive protein. Chest X-ray presented a right-side consolidation. A diagnosis of community acquired pneumonia was made, and the patient started antibiotic therapy. Due to the absence of clinical and analytical improvement, despite lengthy optimized therapy and broad-spectrum antibiotics, an extended aetiological study was conducted, that yielded no results. Chest computer tomography showed non-specific pan-lobar inflammatory findings, supporting the initial diagnosis of pneumonia. A decision was made to proceed with a trans-thoracic lung biopsy. Subsequent histological analysis revealed findings compatible with direct toxicity due to infliximab. The patient sustained a progressive recovery after stopping Infliximab and starting intravenous methylprednisolone 250 mg q.d. for three days, tapered off to oral prednisolone 20 mg.

Direct lung involvement by infliximab has an estimated incidence of 0.5%, and usually takes the form of interstitial pneumonia (Takeuchi et.al. 2008). Its exact mechanism of action is still unknown and can have different forms of presentation. Infliximab-associated lung toxicity is a potentially serious complication of the treatment, though reversible if recognized and promptly treated.

Keywords: *infliximab, monoclonal antibody, Crohn's disease, interstitial pneumonia, toxicity*

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[Abstract:0896]

SUPERIOR VENA CAVA SYNDROME HIDDEN IN A FACIAL EDEMA

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Purpose: Facial edema is a frequent reason for consultation in the emergency room and may be the first manifestation of superior vena cava syndrome (SVCS). In severe cases it can lead to laryngeal and cerebral edema. The aim of this case is to review the clinical presentation, diagnosis and treatment and show how a rapid identification of this process improves the patient's prognosis.

Summary: 83-year-old male patient with type 2 diabetes mellitus, chronic obstructive pulmonary disease, ex-smoker for over 25 years (40-pack a year), bladder tumor treated without recurrence, admitted in emergency medicine for facial and cervical edema accompanied by dyspnea. Physical exam bilateral jugular engorgement, facial edema along with telangiectasias in face, neck and parasternal area was seen. In a chest X-ray a well-defined nodular image in the lower part of right lung and superior mediastinal widening are seen. In a computed tomography of the chest mediastinal lymphadenopathy with SVCS and bilateral pulmonary micronodules, one larger in the upper part of right lung are seen. Cryobiopsy of G7 lymphadenopathy diagnosed a T4 N3M0 Stage IIIB adenocarcinoma. Finally, a bilateral prothesis was placed in the superior vena cava and the patient was presented to the oncology committee.

Conclusions: The height and speed of establishment determine the clinical presentation and severity of symptoms. Treatment has two goals: to relieve symptoms and to treat the cause. The great development of Interventional radiology has allowed, despite the poor prognosis, placing a vena cava stent, brings symptomatic improvement can be achieved, avoiding cerebral complications.

Keywords: facial edema, lung cancer, oncological emergency

Figure 1. *CT scan 1.*

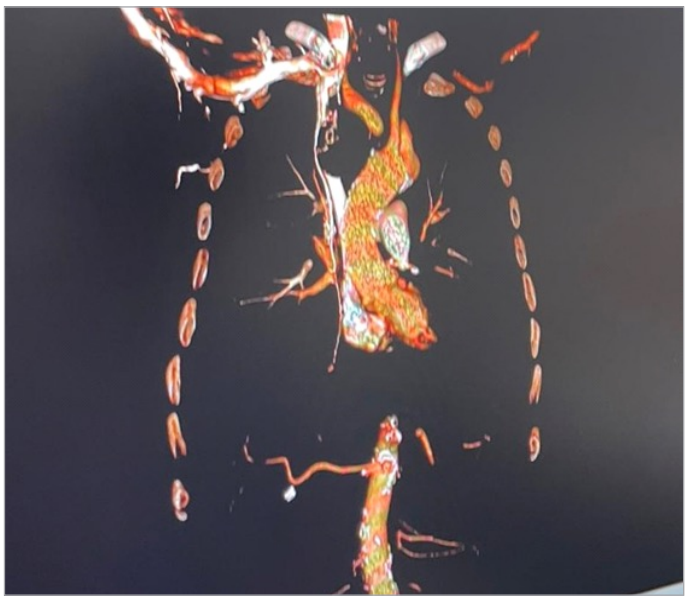

Figure 2. *CT scan 2.*

Figure 3. *Physical exam.*

[Abstract:0949]

REASON OF RESISTANT METABOLIC ACIDOSIS AND HYPOKALEMIA: CASE PRESENTATION OF TOLUENE EXPOSURE

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Hypokalemia may occur because of many reasons. The hypokalemia together with metabolic acidosis may appear in three situations; proximal, distal RTA (renal tubular acidosis)

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and toluene (thinner/ hippurate) exposure. We presented here our toluene exposure case, which was presented with resistant hypokalemia and metabolic acidosis. Our patient, 43 years old, male, with history of coronary artery disease, hypertension and toluene exposure applied to the emergency service with complaints of shortness of breath and loss of sight. The patient was hospitalized a month ago due to suspicion of methyl alcohol use and has a history of intensive care follow-up. Laboratory findings showed K: 3.7 mmol/L (3.5-5.1 mmol/ L), pH: 7.21, HCO3: 11.4 mmol/ L, creatinine: 0.7 mg/ dl (0.70-1.2 mg/dl), urea: 20 mg/ dl (16.6-48.5 mg/ dl), AST: 28 U/L (0-40 U/L), ALT: 64 U/L (0-41 U/L), creatine kinase (CK): 245 U/L (0-190 U/L). The nephrology was consulted with prediagnosis of methyl alcohol poisoning from the emergency service for the patient. After that the patient underwent hemodialysis session for 4 hours. Then he was admitted to internal medicine department. At the follow-ups, potassium decreased to the level of 2.8 mmol/L. ACTH and cortisol levels were normal. Although intravenous potassium infusion was administered, the control value was seen as K: 2.6 mmol/L. After continuous potassium replacement therapies, the potassium levels of the patient has reached the normal interval. It was thought that the intensive thinner exposure, which was existing in the anamnesis of the patient, caused hypokalemia and the metabolic acidosis.

Keywords: *acidosis, hypokalemia, toluene*

[Abstract:0989]

GIANT CELL ARTERITIS: CHARACTERISTICS AT DIAGNOSIS IN BILBAO, SPAIN

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Objectives: The purpose of this study was to learn about the clinical and epidemiology features of Giant Cell Arteritis (GCA) in Internal Medicine Service in Hospital of Basurto (HUB), Bilbao.

Methods: We conducted a retrospective study about hospitalized patients diagnosed with GCA in Internal Medicine Service in HUB between 2021 and 2023. One case has been excluded for not meeting the temporality criteria.

Results: 50% of the patients were women, with an average age of 73 years (58-86 years). Most common clinical manifestations were asthenia and weight loss, in 90% of the cases; cephalgia and fever were present in 70% of the patients. Furthermore, the elevation of acute phase reactants (APR) was present in all patients, highlighting ESR, CRP and ferritin. 80% had anemia, 40% of them had hemoglobin less than 10. Regarding the diagnosis, doppler ultrasound of temporal arteries was the most used (50%), requiring confirmation in 70% of them by biopsy.

Conclusions: GCA is the systemic autoimmune disease most frequently diagnosed in Internal Medicine. It is important to maintain high clinical suspicious in patients with a similar clinical and analytical profile. Larger studies need to be conducted to obtain more exact conclusions.

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Keywords: *giant cell arteritis, vasculitis, diagnosis*

[Abstract:0992]

VASCULAR CLINIC ULTRASONOGRAPHY FOR DETECTION OF SUBCLINICAL ATHEROSCLEROSIS IN AUTOIMMUNE SYSTEMIC DISEASES: A NEW CRITERIA FOR ORGANIC DAMAGE?

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Patients with erythematous systemic lupus and other systemic autoimmune diseases have a higher prevalence of atherosclerosis. the etiology is multifactorial; they present a higher incidence of the traditional cardiovascular risk factors as well as the presence of non-traditional risk factors, such as secondary effects of glucocorticoid treatment, secondary organic inflammation, years of disease evolution.

To take this higher risk into consideration, we suggest evaluating the presence of atheroma plaques in carotid and femoral arteries as well as the carotid intima-media thickness (IMT) using vascular ultrasonography performed by trained internal medicine doctors.

We took a sample of 21 patients of the systemic autoimmune diseases unit and we performed the SLICC/ACR index for organic damage and a clinic vascular ultrasonography, evaluating the presence of atheroma plaques and the IMT.

As a result, we saw that the IMT in our sample of patients was higher than the expected by age and gender. We observed also a positive relation between the SLICC/ACR index value and the IMT.

We believe that this study can help to generate evidence about the utility of the vascular ultrasound as a tool to help categorize better the cardiovascular risk of our patients with systemic autoimmune diseases, and to treat them according to their real cardiovascular risk.

Keywords: *carotid intima-media thickness (IMT), clinical ultrasonography, systemic autoimmune diseases*

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WOMAN		
Age (years)	Theoretical (mm)	Mesured (mm)
20-39	0,67-0,7	0,775
40-49	0,7	0,9
50-59	0,78	0,875
60-69	0,85	1,1
70+	0,9-1	1,33
MEN		
Age (years)	Theoretical (mm)	Mesured (mm)
20-39	0,65	1,25
40-49	0,68	0,91
50-59	0,7	1,05
60-69	0,78	1,05
70+	0,85-0,9	1,09

Table 1. *Theoretical and measured carotid IMT.*

[Abstract:0994]

WHEN THE EASIEST OPTION IS THE SOLUTION

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Case Presentation: A-65-year-old male diagnosed with arterial hypertension, diabetes mellitus, acute myocardial infarction with preserved ejection fraction on subsequent transthoracic echocardiogram (TTE) and peripheral artery disease was admitted because of an infected vascular ulcer in the left foot. During admission, the patient presented with dyspnea, orthopnea and increased edema in the lower limbs.

Examination revealed tachypnea, high blood pressure and supplementary oxygen therapy. On auscultation, there were crackles, minimal edema in the lower limbs and painful abdomen. Left foot ulcer with signs of infection were also present. He was treated for acute pulmonary edema. Bladder catheterization was not performed due to the patient's decision, so daily diuresis was measured. There was no clinical improvement. Analytically, he presented progressive deterioration of renal function, reaching creatinine levels of up to 2.59 mg/dL and concomitant progressive increase in abdominal diameter. TTE and abdominal X-ray was normal. Finally, an abdominal ultrasound was requested, showing a large bladder balloon, and it was decided to catheterize the bladder with evacuation of 2500 cc and complete improvement of the clinical and analytical results.

Conclusions: We found this clinical case interesting, because, as it is common in the hospital, bladder catheterization was initially overlooked by the patient's decision, and was the reason of his clinical and analytical worsening. Therefore, we think it is interesting to point out that when a patient does not improve, it should be reconsidered from the beginning and think about the most basic problem rather than the most complex.

Keywords: *kidney, dyspnoea, anamnesis*

[Abstract:1033]

KIDNEY AND LIVER FAT ACCUMULATION: FROM IMAGING TO CLINICAL CONSEQUENCES

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Purpose: Metabolic syndrome, affecting approximately one third of the adult population in the United States, is a growing medical concern associated with multiple comorbidities. We aim to investigate the association between kidney and liver adipose tissue accumulation, assessed by magnetic resonance imaging proton density fat fraction (MRI-PDFF) technique, along with its relation to clinical and biochemical parameters.

Methods: We performed a retrospective single-center cohort study involving fifty-one participants without phenotypical features of metabolic syndrome.

Findings: The median age and body mass index (BMI) were 34 years and 26.4 kg/m^2, respectively. Our results from the univariate linear regression analysis indicate that both the kidney and liver scores were positively correlated with markers such as BMI, UACR, triglycerides ($p<0.001$) and negatively correlated with eGFR ($p<0.05$). In multivariate analysis, UACR ($p<0.05$), triglycerides ($p<0.01$), eGFR ($p<0.05$) and BMI ($p<0.001$) were found to be independently associated with kidney and liver fat accumulation, respectively (R2=0.64; R2=0.89). There was also a positive correlation between kidney and liver fat accumulation (Pearson coefficient = 0.71, $p<0.001$).

Conclusions: We have demonstrated significant association

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between adipose tissue accumulation in liver and kidney and the parameters of metabolic syndrome. Moreover, the presence of strong association between kidney and liver fat accumulation and kidney function parameters such as UACR and eGFR is an indicator of the clinical significance of such fat accumulation.

Keywords: *metabolic syndrome, hepatosteatosis, magnetic resonance imaging, body mass index*

[Abstract:1083]

INCIDENTAL FINDINGS IN AN ADVANCED CLINICAL ULTRASOUND UNIT AT THE UNIVERSITY HOSPITAL OF NAVARRA

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Introduction: Point-of-care ultrasound (PoCUS) helps to the medical history and physical examination in the initial assessment of hospitalized patients. The unexpected incidental findings can alter the diagnostic and therapeutic plan.

Aim: The aim of this study is to describe unexpected incidental findings in our Advanced Clinical Ultrasound Unit of Internal Medicine (EcoMIHUN).

Materials and Methods: The EcoMIHUN is a reference in the teaching of specialists in clinical ultrasound. We describe patients admitted to whom ultrasound is performed by EcoMIHUN, with incidental findings, within the first 24 hours of admission over 15 consecutive days.

Results: 1. 72-year-old female admitted for heart failure (HF). Severe pericardial effusion on echocardiography.

2. 83-year-old female with lower back pain and urinary tract infection. Abdominal ultrasound reveals metastatic hepatomegaly.

3. 77-year-old male with 10 days of constipation and abdominal pain. Abdominal ultrasound: colon image suggestive of neoplasia.

4. 87-year-old female with edema in the left lower extremity. Ultrasound: left femoral deep vein thrombosis, chronic superficial thrombophlebitis in both lower extremities, and hepatic focal lesions.

5. 89-year-old female with 5 days of fever and bicytopenia. Echocardiography: vegetation image on the mitral valve. Streptococcus anginosus identified in blood cultures after 24 hours.

6. 84-year-old female diagnosed with pulmonary embolism. Abdominal ultrasound: metastatic liver lesions.

7. 42-year-old female with epigastric abdominal pain and low-grade fever. Abdominal ultrasound: hepatic focal lesions.

Discussion and Conclusions: PoCUS, in addition to being a safe, versatile, and useful resource for early diagnosis and guidance in medical procedures. In our cases, it reduced hospital stay and optimized resource management.

Keywords: *initial assessment, incidental findings, PoCUS*

[Abstract:1085]

STUDY OF SEASONALITY AND METEOROLOGICAL PARAMETERS AFFECTING THE SYSTEMIC IMMUNE-INFLAMMATION INDEX (SII)

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Introduction: SII (Systemic Immune-Inflammation Index) is a new, easy to access biomarker that assesses the state of inflammation in various diseases, such as neoplasms and cardiovascular diseases.

Aim: The study of SII in relation to demographic factors, seasonal and meteorological variables.

Materials and Methods: The study included 10075 individuals (5359 men with an average age of 52.3 years/4716 women with an average age of 53.6 years), residents of Regional unit of Fokis, who were tested during the period 2019-2022. The data were retrieved from the database of the LIS system of our laboratory. The meteorological data were obtained from the meteorological station of the National Observatory of Athens in Amfissa. The parameters examined are: gender, age, year, month, wind speed, average daily temperature, maximum daily relative humidity, apparent temperature (Apparent Temperature-AT) and the average apparent temperature over the last 3, 5 and 7 days (AT3,AT5 and AT7, respectively). The SII index was calculated using the mathematical formula: SII=Platelet x Neutrophil/Lymphocyte, where platelet: platelet count, neutrophil: absolute neutrophil count and lymphocyte: absolute lymphocyte count. The statistical analysis of the data was done with the statistical package SPSS v20.

Results: The statistical processing of the collected data was done with descriptive statistics methods (Figure 1) and linear regression (Table 1).

Conclusions: Average daily temperature is the meteorological parameter that satisfactorily predicts the SII values ($p<0.01$). The values of SII are higher during the coldest periods of the year. It is worth noting the abrupt change in SII values between the months of August and September, a fact that could be attributed to the difference in the average temperature of these months.

Keywords: *SII, seasonality, mean temperature*

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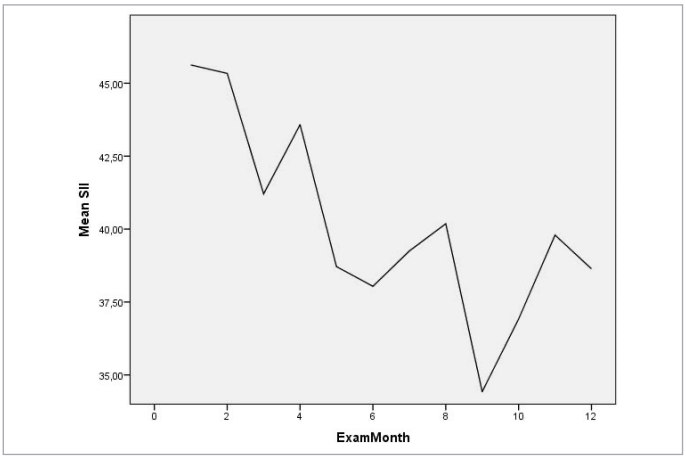

Figure 1.

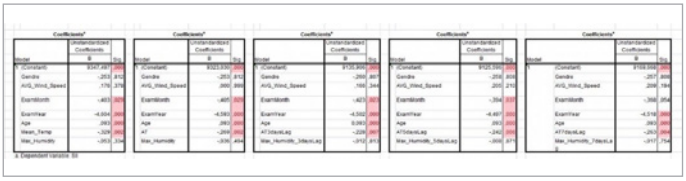

Table 1.

[Abstract:1114]

STUDY OF SEASONALITY AND METEOROLOGICAL PARAMETERS AFFECTING THE RDW-TO-LYMPHOCYTE RATIO (RLR)

Dimitrios Rigas[1], *Konstantinos Stavridis*[2], *Michalis Konstantinidis*[2], *Efstathios Alonaris*[3], *Athanasia Sergounioti*[4]

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Introduction: RLR (RDW-to-Lymphocyte Ratio) is currently being studied for its utility in the assessment and prognosis of various diseases, such as malignant melanoma, liver cirrhosis due to HBV infection, and acute appendicitis in children.

Aim: The study of RLR in relation to demographic factors, seasonal and meteorological variables.

Materials and Methods: The study included 10075 individuals (5359 men, average age: 52.3 yrs and 4716 women, average age: 53.6 yrs), residents in the Regional unit of Fokis, who were tested during the period 2019-2022. The data were retrieved from the database of the LIS system of our laboratory. The meteorological data were obtained from the meteorological station of the National Observatory of Athens in Amfissa. The parameters examined were: gender, age, year, month, wind speed, average daily temperature, maximum daily relative humidity, apparent temperature (Apparent Temperature-AT) and the average apparent temperature over the last 3, 5 and 7 days (AT3, AT5 and AT7, respectively). The RLR index was calculated using the mathematical formula: RLR=RDW/Lymphocyte where RDW: red cell distribution width and lymphocyte: absolute lymphocyte count. The statistical analysis of the data was done with the statistical package SPSS v20.

Results: The statistical processing of the collected data was done with descriptive statistics methods (Figure 1) and linear regression (Table 1).

Conclusions: In Figure 1, we observe that RLR increased during winter, and then, in the midst of a downward trend, showed a sharp increase in April. Subsequently, it returned to its downward trend, reaching its lowest levels in September, and then, it followed an upward trend again. In Table 1, it appears that AT7 was the meteorological parameter that satisfactorily predicted the RLR values was ($p<0.05$).

The potential relationship of RLR changes with epidemiological, environmental and meteorological factors remains to be further investigated.

Keywords: *RDW/Lymphocyte ratio, seasonality, AT7*

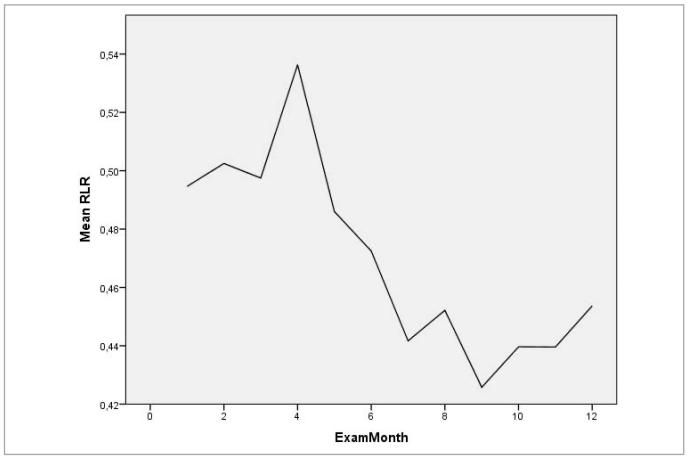

Figure 1.

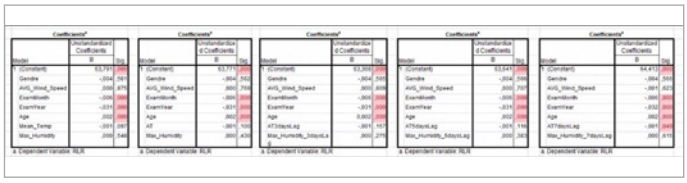

Table 1.

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[Abstract:1121]

COEXISTENCE OF SARCOIDOSIS AND FAMILIAL MEDITERRANEAN FEVER: A CASE REPORT

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Objectives: Sarcoidosis is a chronic inflammatory disease characterized by non-caseating granuloma formations. It may occur with bilateral hilar lymphadenopathy, skin lesions, ocular and nervous system involvement. Familial Mediterranean fever (FMF) is the most common autoinflammatory disease, clinically characterized by recurrent attacks of fever and polyserositis. In this case report, we will present a patient with coexistence of sarcoidosis and FMF.

Case Presentation: A 32-year-old male was admitted to the internal medicine clinic due to recurrent abdominal pain and fever. During his examination, it was determined that he had intermittent abdominal pain attacks since his childhood, and he was diagnosed with sarcoidosis histopathologically 2 years ago. The patient has been smoking for 10 years. On physical examination, there was minimal tenderness in the abdomen. Nervous system examination was normal. In laboratory examinations, urea, creatine, other biochemical tests, urinalysis and hemogram were found to be normal. CRP was 6.03 mg/dl (0-0.5 mg/dl), ESR was 47 mm/hour (0-20 mm/hour). ANA, anti-CCP, RF, anti-CCP, brucella tests were negative. Abdominal ultrasound and the chest X-ray were normal. Thorax computed tomography performed 2 years ago was reported as compatible with stage 1 sarcoidosis. In the FMF gene analysis, the M694V gene was found to be homozygous and a diagnosis of FMF was made in addition to sarcoidosis.

Conclusions: Very few cases of the coexistence of sarcoidosis and FMF have been reported in the literature. The fact that both diseases are chronic and inflammatory suggests that there may be a common etiopathogenesis. More studies are needed to elucidate the etiopathogenesis.

Keywords: *sarcoidosis, familial Mediterranean fever, FMF, inflammatory diseases*

[Abstract:1133]

ORAL MICROBIOME AND HUMAN HEALTH

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Introduction: The oral cavity hosts the second largest and most diverse microbiome after the gut. The oral microbiome is very important for maintaining not only oral, but also overall physical health. Due to its ease of sampling, it is the most well-studied microbiome to date. The application of genomics technology, including Next Generation Sequencing (NGS) and Bioinformatics, has allowed the emergence of new aspects and properties of the oral microbiome.

Aim: to briefly review the modern research on the relationship of the oral microbiome with health and various diseases.

Background: Oral dysbiosis is defined as an imbalance or disorder of the oral microbiome caused by various factors, such as various diseases, poor oral hygiene, medication and diet. Oral dysbiosis may contribute to the development of various oral and systemic diseases, such as dental caries, periodontitis, oral and other neoplasms, cardiovascular disease, diabetes mellitus, and various lung diseases, such as ventilator-associated pneumonia (VAP) and aspiration pneumonia. Furthermore, the oral microbiome exhibits a high degree of homology with the intestinal microbiome due to the anatomical continuity of the gastrointestinal tract and therefore, oral dysbiosis inevitably affects the intestinal microbiome as well. *Helicobacter pylori* has been identified in the dental plaque of individuals with *H.pylori infection*, while the presence of *Porphyromonas gingivalis* has been associated with the occurrence of digestive tract neoplasms. Recent studies indicate a correlation between poor oral health and diseases such as rheumatoid arthritis, Alzheimer's disease, dementia, and pregnancy-related complications.

Conclusions: A better understanding of the oral microbiome has led to on targeted interventions, such as the administration of antimicrobial drugs and probiotic/prebiotic preparations, which seek to restore the balance of the normal oral flora and prevent diseases related to oral dysbiosis.

Keywords: *oral microbiome, dysbiosis, interventions*

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[Abstract:1136]

THE IMPORTANCE OF VAGINAL MICROBIOME FOR THE WOMEN'S HEALTH

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Introduction: The vaginal microbiome is a complex and dynamic micro-ecosystem that constantly changes, during the life of the woman. The healthy vaginal microbiome consists mainly of members of the genus *Lactobacillus (L.crispatus, L.gasseri, L.iners, L.jensenii)* which prevent the invasion of pathogens into the vagina, regulating the vaginal pH through the production of lactic acid, bacteriostatic and bactericidal substances, but also through competitive exclusion. The vaginal microbiome is unique for each woman and the disruption of its composition may indicate the onset of various pathological conditions.

Aim: The brief presentation of the role of the vaginal microbiome for the health of the female reproductive system.

Background: Vaginal dysbiosis is the disturbance of the balance between the microbial populations of the vaginal microbiome at the expense of the normally prevailing *Lactobacillus spp* and its gradual, partial or total, replacement by other microorganisms, such as *Gardnerella vaginalis*, *Bacteroides spp*, *Mobiluncus spp*, *Candida spp*. Vaginal health disorders are of microbial etiology in over 90% (bacterial vaginosis, candidal vulvovaginitis, trichomoniasis, aerobic vaginitis) and occur on the basis of vaginal dysbiosis. Women with a disturbed lactobacilli population show higher rates of viral infections of the genital system (HPV, HSV-2, HIV),whereas the increased presence of lactobacilli seems to exert a protective role against infections by *Neisseria gonorrhoeae*, *Mycoplasma genitalium*, *Chlamydia trachomatis*, it does not allow vaginal pathogens to reach the cervix and the uterus, and also, the urinary system. Furthermore, studies have identified a possible correlation between the composition of the vaginal microbiome and preterm birth.

Conclusions: Modern biomedical technology has allowed a better understanding of the vaginal microbiome, which opens new perspectives for the interpretation of its role and for innovative interventions in the health of the female reproductive system.

Keywords: *vaginal microbiome, women's health, Lactobacillus spp*

[Abstract:1146]

BUMP IN THE BOWELS: PEG INTERNAL BUMPER DILEMMA UNRAVELED IN SMALL BOWEL OBSTRUCTION

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Percutaneous endoscopic gastrostomy (PEG) tubes play a pivotal role in providing enteral access for patients with oral intake challenges. Beyond nutritional support, PEG tubes facilitate medication administration crucial for patient well-being. However, complications, ranging from mechanical issues to gastrointestinal challenges, pose inherent complexities. This discussion explores a distinctive case of small bowel obstruction caused by the internal bumper of a PEG tube, highlighting the intricate challenges associated with this common intervention. Understanding such complications is crucial for optimizing patient outcomes in diverse clinical scenarios.

A 78-year-old female with multiple comorbidities presented for PEG tube replacement after self-dislodgment. After undergoing PEG replacement, the patient was discharged upon achieving tolerance to the targeted feeding rate. Two days later, she returned with recurrent vomiting and abdominal tenderness. CT Abdomen revealed borderline dilated small bowel loops down to the dislodged PEG tube at the terminal ileum, suggesting ongoing mechanical obstruction.

Colonoscopy revealed no foreign body, leading to transfer for double balloon/spiral enteroscopy, successfully retrieving the internal bumper at another facility.

This case prompts consideration of preventive strategies, including vigilant monitoring for symptoms indicative of PEG tube-related complications, routine imaging assessments, and perhaps modifications in PEG tube design to minimize the risk of mechanical obstruction. Furthermore, it highlights the importance of a multidisciplinary approach, involving gastroenterologists, radiologists, and surgeons, to optimize patient outcomes in the face of such intricate complications.

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Keywords: *PEG tube complication, PEG tube dislodgment, small bowel obstruction*

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[Abstract:1175]

RARE CAUSE OF HYPERCALCEMIA: SMALL-CELL CARCINOMA OF THE OVARY, HYPERCALCEMIC TYPE

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Hypercalcemia is a condition in which calcium level in the body is above normal. Malignancy is one of the reasons of hypercalcemia. Many mechanisms play role in malignancy related hypercalcemia. These are parathormone (PTH) related peptide-mediated humoral hypercalcemia, hypercalcemia due to osteolytic metastasis, 1.25 Vitamin D related hypercalcemia and PTH related hypercalcemia in parathyroid carcinoma and extra parathyroid cancers. In this case, I presented a 37 -year-old woman with small cell carcinoma of the ovary hypercalcemic type which is a rare condition. A 37 year old woman with known panic disorder presented with abdominal pain, constipation and bloating. There was no medication used by the patient. In her laboratory results, serum calcium level was 15.70 mg /dl (8.6-10 mg/dl) and tumor marker was CA 125: 123 u/ml. Upon examination, right adnexial mass was detected on ultrasound and magnetic resonance imaging. Intravenous isotonic fluid infusion was administered for hypercalcemia treatment in the preoperative period. Obstetrics and gynecology department removed the mass surgically. Firstly, her postoperative calcium levels were 8,5 mg/dl and then gradually decreased to 6.8 mg/dl without any treatment. Other laboratory results were PTH 107.9 ng/dl (normal range 15-65 ng/dl), 25-OH vitamin D level <7 µg/l and phosphorus: 2.4 mg/dl (2.5-4.5mg/dl). Intravenous calcium replacement therapies were administered. Her pathology result was small cell carcinoma of the ovary hypercalcemic type which explains her hypercalcemic clinical situation.

Keywords: hypercalcemia, ovarian cancer, paraneoplastic syndrome

[Abstract:1202]

ULTRASOUND ASSESSMENT OF PERIPHERAL INTRAVENOUS CATHETER FAILURE

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Introduction: Despite their widespread use worldwide, peripheral intravenous catheters (PIVC) are affected by a high complication rate. Inflammatory complications are one of the most common causes of catheter failure. Currently, the Visual Infusion Phlebitis (VIP) score is the most used tool to check for the presence of these complications. However, the use of ultrasound (US) signs for this purpose could be an attractive alternative.

Objective: To evaluate the sensitivity and specificity of US and VIP score=1 to identify and recognize early signs of PIVC failure. Time to positivity for US and VIP score were evaluated as secondary outcomes.

Methods: A prospective observational study was conducted, enrolling patients from the Departments of Internal Medicine, Pneumology and Neurology of the Luigi Sacco Hospital (Milan). For each patient, US and VIP of the exit-site were performed every 24 hours until 96 hours after catheter insertion. Sensitivity, specificity, and predictive values for ultrasound and clinical examinations were calculated in comparison to catheter failure.

Results: Two-hundred patients were enrolled. The presence of ultrasound patterns suggestive of edema (p=0.028), fibroblastic sleeve (p<0.001), thrombosis (p=0.001), and at least one of the abovementioned echographic signs (p<0.01) were highly significant predictors of complications. Ultrasound had shown better sensitivity and earlier predictive ability than clinical evaluation (0.47 days and 1.9 days respectively).

Conclusions: The presence of ultrasound findings of inflammatory complications is correlated to PIVC failure. An ultrasound protocol -requiring a minimal training- has proven to be more effective than clinical observation in recognizing early signs of device failure.

Keywords: peripheral intravenous catheters (PIVCs), Visual Infusion Phlebitis score (VIP), subcutaneous edema, fibroblastic sleeve, thrombophlebitis, catheter failure

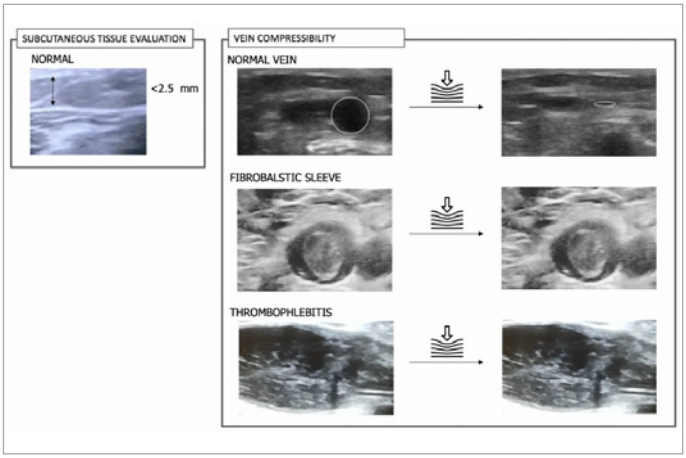

Figure 1 *Ecographic signs.*

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	Sensitivity	Specificity	Disease Prevalence	Positive Predictive Value	Negative Predictive Value
24 hours VIPS	5.66% (2.11-11.91)	100% (96.15-100)	53% (45.83-60)	100%	48.45% (47.29-49.62)
24 hours Fibroblastic sleeve	15.09% (8.88-23.35)	100% (96.15-100)	53% (45.83-60.08)	100%	51.09% (49.08-53.09)
24 hours US	17.92% (11.15-26.57)	100% (96.15-100)	53% (45.83-60.08)	100%	51.93% (49.71-54.15)
48 hours VIPS	28.3% (19.98-37.88)	100% (96.11-100)	53.27% (46.08-60.35)	100%	55.03% (52.06-68.59)
48 hours Fibroblastic sleeve	57.55% (47.57- 67.09)	100.00% (96.11- 100)	53.27% (46.08-60.35)	100%	67.39% (62.35-72.06)
48 hours Thrombosis	10.38% (5.30-17.81)	100% (96.11-100)	53.27% (46.08-60.35)	100%	49.47% (47.85-51.09)
48 hours US	68.87% (59.14-77.51)	100% (96.15-100)	53.27% (46.08-60.35)	100%	74.02% (68.21-79.08)
72 hours VIPS	59.55% (48.62-69.83)	100% (95.94-100)	49.44% (41.93-56.98)	100%	71.20% (73.12-85.41)
72 hours Edema	5.62% (1.85-12.63)	100% (96.03-100)	49.44% (41.93-56.98)	100%	52% (50.73-53.26)
72 hours Fibroblastic sleeve	86.52% (77.63-92.83)	100% (96.03-100)	49.44% (41.93-56.98)	100%	88.35% (81.75-92.77)
72 hours Thrombosis	11.24% (5.52-19.69)	100% (96.03-100)	49.44% (41.93-56.98)	100%	53.53% (51.69-55.36)
72 hours US	97.75% (92.12-99.73)	100% (96.03-100)	49.44% (41.93-56.98)	100%	97.85% (92.04-99.44)
96 hours VIPS	83.78% (67.99-93.81))	100% (95.65-100))	28.93% (21.05-37.87)	100%	93.26% (86.93-96.64)
96 hours Fibroblastic sleeve	94.29% (80.84-99.30)	98.84% (93.69-99.97))	28.93% (21.05-37.87)	97.06% (82.44-99.57)	97.70% (91.71-99.39)
96 hours US Thrombosis	100% (90.00-100)	98.84% (93.69-99.97)	28.93% (21.05-37.87)	97.22% (83.30-99.59)	100%)

Table 1. *Complications. Specificity, Sensitivity, disease prevalence, positive predictive value, negative predictive value.*
VIPS: visual infusion phlebitis score; US: ultrasound signs

[Abstract:1205]

AMYLOIDOMA OF THE DORSAL SPINE - A RARE ENTITY

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Introduction: Amyloidosis results from the extracellular accumulation of amyloid protein, which can occur anywhere in the body and can be focal or multi-organ. It has an annual incidence of 5.1 to 12.8 cases per million inhabitants. Primary solitary amyloidosis consists of a nodular mass of amyloid substance, without evidence of plasma cell dyscrasia or systemic amyloidosis, rarely manifesting in the dorsal spine, which results from local deposition of immunoglobulin light chains.
Case Presentation: A 76-year-old woman went to the Emergency Department with back pain with 4 days. No relevant personal history. On objective examination, she presented pain on palpation of the dorsal spine. Protein electrophoresis revealed a small peak of monoclonal IgA Lambda protein. Analytically, she had elevated beta2 microglobulin, elevated Kappa and Lambda free light chains (normal ratio). Immunophenotyping of the bone marrow aspirate suggested monoclonal gammopathy of undetermined significance. Myelogram with no significant alterations. Computed tomography of the dorsal spine revealed "lytic areas in the vertebral bodies from D6 to D7", the histological diagnosis of which showed bone deposition of amyloid substance. The other complementary exams ruled out neoplasia or infectious conditions. The abdominal fat biopsy revealed no amyloid substance. After a year, the patient showed no progression of hematological disease or evidence of amyloid protein deposition anywhere.
Discussion: Primary amyloidoma of the spine is extremely rare, with very few cases described in the literature, and manifests preferentially as lytic lesions. Its diagnosis is challenging, and it is essential to exclude other pathologies with a much worse prognosis.

Keywords: *amyloidosis, amyloidoma, dorsal spine*

[Abstract:1209]

CARDIOEMBOLIC THROMBOSIS IN AN INTRAVENOUS DRUG USER

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Summary: A 39-year-old illicit intravenous (iv) drug user male presented to the emergency department (ED) with a history of chest oppressive pain, dyspnea and bilateral edema of the legs. One hour before presenting to the ED, he had suddenly developed intense pain and pallor of the left inferior limb, with cyanosis of the fingers. He was diagnosed with a non-ST-elevation myocardial infarction (NSTEMI). The computed tomography (CT) angiography showed multiple thrombi in the left atrial appendix and left ventricle; partial occlusion of the right renal artery with two ischemic lesions of the kidney and ischemia of approximately 10% of the spleen, occlusion of the left popliteal artery which was submitted to a thromboembolectomy. A few minutes later, a new thrombotic embolus of the left inferior limb emerged, needing another urgent thromboembolectomy. Two days later, he presented a sudden loss of consciousness and new ischemic lesions in the territory of the right and left posterior cerebral arteries and left posterior inferior cerebellar artery. No genetic or acquired thrombophilias were identified, except for the use of illicit drugs. The patient improved his neurological status and was discharged on warfarin and stopped drug use. The patient did not present any new ischemic phenomena.
Conclusions: Some illicit drugs increase the risk of arterial thrombosis. Treatment with warfarin is suggested in these cases as well as stop using illicit drugs.

Keywords: *arterial ischemia, Illicit drugs, warfarin*

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[Abstract:1224]

ACTIVITY OF THE ADVANCED CLINICAL ULTRASOUND UNIT OF THE UNIVERSITY HOSPITAL OF NAVARRA FOR 6 MONTHS. DESCRIPTIVE STUDY

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Summary: Point-of-care ultrasound (PoCUS), a recent exploratory technique which combines safety, usefulness and versatility. The University Hospital of Navarra has an Advanced Clinical Ultrasound Unit (EcoMIHUN) composed of seven accredited Medical Doctors who have currently trained more than 20 students.

Purpose: Carry out a descriptive study of the type, number and findings of the ultrasound explorations performed.

Methods: Retrospective descriptive study compiled from the EcoMIHUN registry and the Google Forms application, from March to August 2023. The type of ultrasound and the variables of age, sex, reason for the examination and findings were analysed.

Findings: In this study, 418 ultrasound explorations were performed in 251 patients. The most frequently performed techniques, in order of frequency, were cardiac ultrasound (39.7%), abdominal (33.9%), pulmonary (11.96%), lower limb venous (6.93%), carotid (5.98%) and muscular (1.43%). Pathological findings were found in two-thirds of the cardiac scans, in 71% of the abdominal ones, in 78% of the pulmonary scans, in 45% of the lower limb vascular scans, in 80% of the carotid scans and in half of muscular scans. The most frequent findings were cardiac valve alterations, steatosis as an abdominal manifestation, pleural effusion as a pulmonary alteration, femoral deep vein thrombosis and atheromatous carotid plaques.

Conclusions: PoCUS is an exploratory technique increasingly used in Internal Medicine Departments. It stands out that pathological findings have been found in approximately 50% of the examinations performed. This finding supports the systematic implementation of PoCUS as a complement to the physical examination.

Keywords: *Ultrasound, exploratory, technique*

[Abstract:1249]s

FAMILIAL MEDITERRANEAN FEVER IN ADULTHOOD; A SINGLE CENTER EXPERIENCES

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Purpose: Familial Mediterranean Fever (FMF) is an autosomal recessive inflammatory disease that manifests itself with recurrent attacks of polyserositis. It occurs with recurrent abdominal pain, fever chest pain and arthritis attacks. The severity clinical findings may depend on the MEFV mutation. Our aim in this study is to investigate the clinical and demographic MEFV mutations and treatment responses of FMF patients.

Methods: Demographic characteristics, clinical and laboratory findings of 70 FMF cases older than 18 who were followed up in internal medicine clinic under colchicine treatment for at least 6 months were evaluated retrospectively.

Results: 32 (45.7%) of the cases were female and 38 (54.2%) were male. Their mean age at the time of the study was 34±4.4 years, and their mean age at disease onset and diagnosis was 18.3±3.6 years. The rate of consanguineous marriage was found to be 21.2%. 37 (52.8%) of the FMF cases had a history of relatives with FMF. When evaluated in terms of mutation analysis M694V homozygous mutation was detected in 14 (20%) M694V heterozygous mutation detected in 12 (17.1%) M694V and exon 10 mutations were found as compound heterozygote in 6 (8.5%) and heterozygous exon 10 mutation was detected in 7 (10%) cases. Four (5.7%) of the cases followed up with colchicine treatment were evaluated as treatment resistant. Homozygous M694V mutation was detected in 3 (75%) of the resistant patients.

Conclusions: FMF is common in the Mediterranean region. When full compliance with treatment is ensured, attacks can be prevented to a large extent and the development amyloidosis can be prevented. Therefore, diagnosis at an early age is important in preventing unnecessary surgeries and complications.

Keywords: *familial mediterranean fever, proteinuria, autoinflammatory*

SYMPTOMS	NUMBER AND PERCENTAGE
Stomachache	63 (90%)
Fever	62 (8.5%)
Arthritis	34 (48.5%)
Chest pain	12 (17.1%)
Erythema	18 (23.8%)
Proteinuria	2 (2.8%)
Appendectomy	15 (23.8%)

Table 1. *Disease-related symptoms.*

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[Abstract:1260]

NOT ALL CASES OF GENERALIZED EDEMA AND ACUTE KIDNEY DISEASE ARE A CARDIO-RENAL SYNDROME

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Case Description: A 74-year-old female was admitted with worsening edema and dyspnea. She was diagnosed with acute decompensated heart failure (ADHF), managed with intravenous furosemide and discharged with metolazone and furosemide. Medical history includes hypertensive cardiomyopathy with multiple previous admissions, chronic kidney disease G3bA1; and chronic myeloid leukemia on imatinib for 7+ years.

After 3 weeks the patient returned with same symptoms. Vital signs showed blood pressure of 75/45 mmHg. Physical exam revealed pitting edema (3+) in arms and legs and bilateral crackles. Blood tests showed elevated creatinine (6.5 mg/dL), urea (140 mg/dL), Nt-proBNP (10725 pg/mL) and hypoalbuminemia (2.5 g/dL).

Clinical Hypothesis: ADHF with cardio-renal syndrome type 2.

Diagnostic Pathways: Intravenous furosemide was resumed, however she remained in oligo-anuria raising doubts about the diagnosis. Echocardiography showed preserved systolic-diastolic function; inferior vena cava measured 12 mm with respiratory variability. Abdomino-pelvic ultrasound displayed moderate free fluid. Aspiration of ascitic fluid revealed a serum-ascites albumin gradient of 0.4 g/dL; kidney ultrasound ruled out obstructive causes. After careful consideration imatinib was identified as the likely culprit, having been discontinued. Due to the severity of hypoalbuminemia, hypotension and generalized edema caused by increased permeability due to imatinib, the patient was managed with albumin. She remained anuric, leading to dialysis initiation. Over 3 weeks, diuresis improved and creatinine-urea levels progressively decreased. After 2 months, kidney function recovered and edema did not reoccur.

Discussion: Evaluating generalized edema and acute kidney disease requires a comprehensive approach. This case emphasizes the importance of a thorough work-up for edema and highlights rare side effects like anasarca from imatinib.

Keywords: edema, acute kidney injury, imatinib

[Abstract:1284]

UNUSUAL COMPLICATION OF AN ANTIHYPERTENSIVE DRUG

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Alpha-methyldopa is an antihypertensive prodrug with current indication for gestational hypertension and pre-eclampsia, it is a selective alpha-adrenergic agonist for alpha 2. It was commonly used as an antihypertensive although its use is currently less. It has a set of adverse reactions involving the central nervous and cardiovascular systems, among others.

Case Presentation: Male, 53 years old, habitually taking alpha-methyldopa 250 mg daily for 7 years, in the context of high blood pressure in a Primary Health Care consultation. Reference to good blood pressure control during the early stages and apparently no side effects from the drugs. He later develops orthostatic hypotension and slowness in activities of daily living and walking, with clear interference in his daily life. In the medicine consultation and later in neurology, bradycardia, orthostatic hypotension and rigid akinetic parkinsonian syndrome with an SCT-20, stage III (Hoehn York) were highlighted. Suspension of methyldopa and introduction of lisinopril 20 mg once a day and amlodipine 5 mg once a day and prospective follow-up in consultations with complete reversibility of sinus bradycardia, without orthostatic hypotension and with complete reversibility of parkinsonian syndrome without the use of antiparkinsonian drugs.

Conclusions: An exhaustive review of the pharmacological history and possible side effects of drugs is absolutely necessary in all age groups, particularly in the elderly, due to the possibility of less common effects and possible interactions in polymedicated patients. The full reversibility of the symptoms and changes found with the use of a drug for arterial hypertension highlights the need for its identification.

Keywords: alpha, methyldopa, parkinsonian, syndrome

[Abstract:1309]

VITAMIN B12 DEFICIENCY

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Introduction: Cobalamin is a generic term for components of B12 biological activity. These components are involved in nucleic acid metabolism, methyl transfer and repair of myelin synthesis.

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Vitamin B12 deficiency may result from inadequate intake, inadequate absorption, decreased utilization, or use of certain drugs. Complications are usually hematological and neurological.

Case Presentation: Male patient, 54 years old, with symptoms that had been progressing for 1 year with complaints of paresthesias and decreased sensitivity in the feet that progressed upwards and symmetrically to the trunk and progressive incoordination of gait requiring support.

Objectively, he had an ataxic paraparesis with live patellar and Achilles reflexes of normal threshold, with bilateral Babinsky and proprioception errors in the lower limbs. He had macrocytic anemia (Hb:9.6 g/dL and VGM:113 fL) with decreased vitamin B12 levels (4 pg/mL N>157) and normal folic acid levels. Endoscopic investigation revealed atrophic gastritis with negativity of anti-parietal cell antibodies, anti-intrinsic factor.

Spinal MRI with T2 hypersignal at the level of the cervical cord. Concluding subacute combined degeneration of the marrow. With vitamin B12 replacement after 3 months she was asymptomatic with a normal blood count and normal vitamin B12 dosage.

Conclusions: Electivity of hematological and neurological damage is common in vitamin B12 deficiency, correction led to total reversibility of neurological complaints.

Keywords: *B12, subacute, combined, degeneration, marrow*

[Abstract:1333]

POINT-OF-CARE ULTRASOUND – A NEW FUTURE IN UNDERGRADUATE MEDICAL TEACHING

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Ultrasound has had increasing relevance over the last few decades. Its availability, non-ionizing nature, as well as its affordability comparing to other methods, makes it as one of the ideal methods for diagnosing a pneumothorax for instance.

However, in Portugal, undergraduate medical education does not include an exhaustive component of ultrasound in its curriculum, neither theoretical nor practical. The exponential evolution of ultrasound techniques as well as ultrasound devices, reverberating to the clinical practice, the University of Beira Interior (UBI), embarked into training physicians in basic skills of point-of-care ultrasound. After an experimental year with success and acceptance, the project evolved and ran smoothly in the second year. In addition to the managing physician, a group of interests enrolled, consisting of a newly graduated doctor and fifteen students attending the Master in Medicine at FCS-UBI. The peer-learning method has shown exciting results in several courses and faculties, and ultrasound teaching has not been any different. Students received training in visualizing various structures throughout the body. The sessions were divided into a theoretical part taught by students followed by hands-on taught by students and physicians. At the end of each training group, a questionnaire was provided to all attending students so they could assess the organization and training capacity of an innovative peer-learning method. The method received great appreciation, with 91.7% of students answering that the learning process was facilitated by this method and 95.5% feeling more confident asking questions to their peers.

Keywords: *ecography, teaching, peer learning*

[Abstract:1468]

IMPACT OF TRAINING INTERVENTION ON NURSES ON THE ADEQUACY OF THE THROMBOPROPHYLAXIS OF VENOUS THROMBOEMBOLISM IN MEDICALLY ILL PATIENTS ADMITTED TO EMERGENCY DEPARTMENT. PROTESU 2 STUDY: PRELIMINARY ANALYSIS

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Venous thromboembolic disease (VTE) is the leading cause of preventable hospital mortality. VTE is more serious when it develops in hospitalized patients than in outpatients, especially in medically ill patients. However, the adequacy of thromboprophylaxis treatment is suboptimal. Currently, the available evidence highlights the importance of training on nurses. PROTESU 2 Study is a prospective, observational, multicenter study. All medically ill patients admitted to the Emergency Department (ED) of 15 Spanish hospitals, before and after a training intervention on nurses, were included in the period of the study. Three recruitment periods were established in the phases: phase 0: before the training intervention on nurses; phase 1: first month after the intervention; and phase 2: sixth month after intervention on nurses, to evaluate the persistence over time of changes in practice. The primary objective of the study is the evaluation of the adequacy of thromboprophylaxis in acute medically ill patients admitted to ED after intervention on nurses. Evaluation of the adequacy of current thromboprophylaxis and identify the factors that are associated with the inadequacy of thromboprophylaxis were the secondary objectives. Preliminary data is presented. We have recruited 637 patients in phase 0. High risk patients (PADUA score >4) were 387 (60.75%) patients and only received thromboprophylaxis 232 patients (77.59%). Low risk (PADUA score <4) were 250 patients (39.24%) and

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prophylaxis were 138 (55.2%).There was a low adequacy of thromboprophylaxis in medically ill patients. The involvement of intervention on nurses could be a tool for improve the adequacy.

Keywords: *thromboembolic disease, training on nurses, thromboprophylaxis adequacy, emergency department, medical patients, PADUA score*

Figure 1. *Participating hospitals.*
19 emergency departments are participating in this study

Data table 1 . Population characteristics.	n = 637
Age	69,81(18,75)
Sex (female %)	290(45,52%)
Body mass index>30	151(23,7%)

Data table.2	n = 637
High risk patients (PADUA score >4)with thromboprofilaxis	353/196(55,41%)
Low risk patients (PADUA score<4) with thromboprofilaxis	284/156(55,2%)
Contraindication thromboprofilaxis	61(9,58%)
Bleeding	15(2,35%)
Development of thromboembolic disease	10 (1,57%)

Table 1. *PROTESU study.*

[Abstract:1504]

CHALLENGING MANAGEMENT OF CONCURRENT SUBDURAL HEMATOMA AND EXTENSIVE PULMONARY EMBOLISM: A CASE REPORT EMPHASIZING THE ROLE OF MECHANICAL THROMBECTOMY AND INFERIOR VENA CAVA FILTER RETRIEVAL

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Case Presentation: A 75-year-old male with a history of hypertension, diabetes, dyslipidemia, and a recent traumatic subdural hematoma presented to the Emergency Department a month later with gait instability, desaturation (88-90%), dyspnea, and tachycardia. A CT pulmonary angiogram revealed extensive bilateral pulmonary embolism with right heart chamber overload. Cranial CT showed a slight reduction in hematoma size, but with a potential rebleeding focus in the frontal area.

Due to a high hemorrhagic risk, an inferior vena cava (IVC) filter was inserted, followed by titration of low-molecular-weight heparin. Subsequent CT scans ruled out acute bleeding. Venography two weeks later revealed complete thrombosis of inferior vena cava, originating from the right common iliac vein, partial thrombosis in the left common iliac vein, and femoral vein thrombosis in the right lower limb.

Given the contraindication for pharmacomechanical thrombectomy due to a concomitant subdural hematoma, recanalization attempts were made solely through mechanical thrombectomy, followed by subsequent removal of the IVC filter, which occurred without complications. The patient was discharged on apixaban.

Discussion: IVC filters are a therapeutic option for patients with thromboembolism and contraindication to anticoagulation. Filter thrombosis remains a major concern, with variable incidence (5%-80%). Although it may not be associated with a worse prognosis, higher mortality and morbidities could appear as IVC thrombus progresses. Limited evidence is available on filters with massive thrombus (>1x1 cm), and therapeutic options include anticoagulation. Other invasive therapies such as catheter directed thrombolysis, pharmaco-mechanical thrombectomy, or exclusively mechanical therapy, in order to reduce thrombus burden, might be considered.

Keywords: *Inferior vena cava filter, mechanical thrombectomy, hemorrhagic risk, subdural hematoma.*

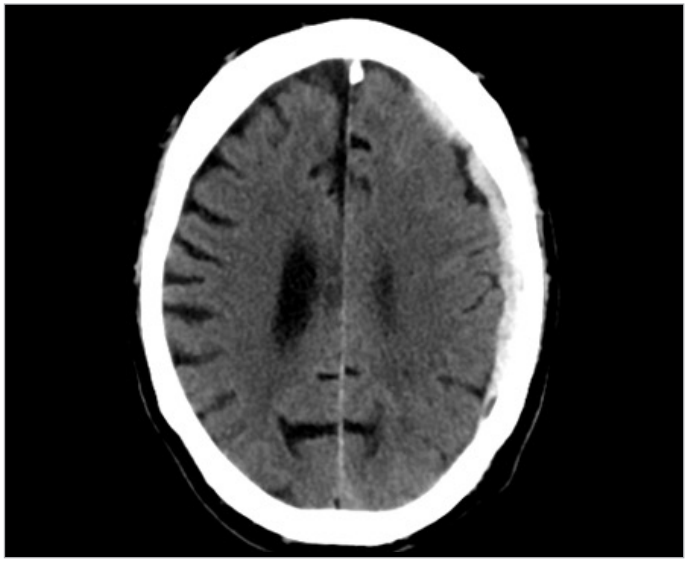

Figure 1. *Left convexity subdural hematoma, producing mild mass effect, without evidence of intracranial hypertension.*

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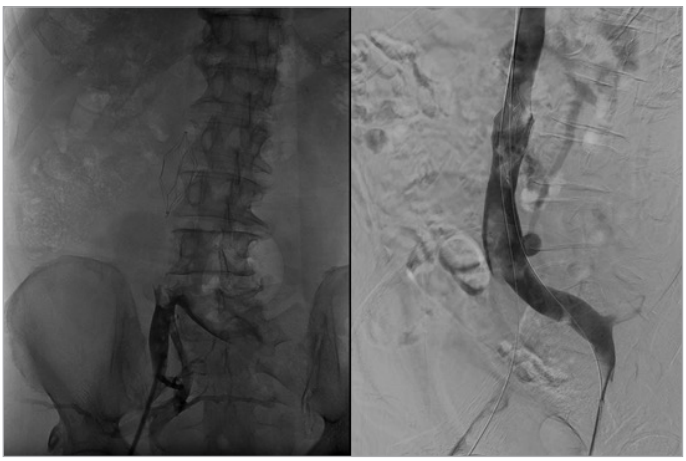

Figure 2. On the left, phlebography showing complete thrombosis of the inferior vena cava. On the right, a second phlebography after mechanical thrombectomy showing recanalization of the inferior vena cava with residual thrombus.

[Abstract:1564]

COMPARATIVE ANALYSIS OF THE USE OF PERIPHERALLY INSERTED VASCULAR ACCESS DEVICES IN INTERNAL MEDICINE AND ITS COMPLICATIONS

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Objectives: To evaluate the characteristics of inpatients with peripheral vascular accesses, both midline and PICC (peripherally inserted central catheter), and their complications.

Materials and Methods: Retrospective observational study in patients admitted to an internal medicine department of a tertiary level hospital who required PICC or midline placement during the year 2022. Demographic and admission variables were collected. Data were also collected on device characteristics, reason for insertion and removal, complications and evolution.

Results: From a total of 189 patients, 52.9% were male. Mean age was 74.4 years (±13.49). Most frequent comorbidities were arterial hypertension (81.5%) and dyslipidemia (57.7%). Of the total, 96 (53%) were midline and 85 (47%) PICC. Use of PICC was significantly higher in those with an ICU stay (p=0.002), parenteral nutrition (p=0.013) and those admitted for oncologic diseases (p=0.05). A significantly higher number of midline was used during admissions for infectious diseases (p=0.01), however, their use was also associated with greater withdrawal due to thrombosis (p=0.02). Regarding complications, 12 associated infections were recorded (13.5%), of which 41.7% occurred in midline and 58.3% in PICC. There were 11 associated thromboses (12.5%), of which 45.5% had midline and 54.5% had PICC. Finally, 28 patients (29.2%) died with midline versus 27 (31.8%) with PICC. There were no statistically significant differences.

Conclusions: In our series we observed different characteristics according to catheter and indications for its insertion. A high number of associated infectious and thrombotic complications were observed, as well as deaths, with a greater tendency in patients with PICC insertion.

Keywords: *peripherally inserted vascular access, peripherally inserted central catheters, midline catheters*

[Abstract:1566]

THE GOOD MIMIC - A RARE CASE OF EXTRAPELVIC ENDOMETRIOSIS

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Introduction: Recent studies show that extrapelvic endometriosis, traditionally thought to be rare, has been reported in a considerable number of cases. Despite this, this condition remains underdiagnosed and poses a diagnostic challenge.

Case Presentation: The 47-years-old woman presented at the rapid diagnosis clinic with a 4-week history of severe abdominal pain. Outpatient CT findings suggested peritoneal carcinomatosis, prompting further investigation. The patient reported asthenia, attributing it to menstruation and significant hemorrhagic losses, anorexia and a rapid 5% loss of body weight over 2 weeks. Physical examination revealed tenderness upon palpation of the right flank, without palpable masses or organomegaly.

Diagnostic Pathways: Analytical studies showed an elevated CA125 level with no other abnormalities. A whole-body CT scan revealed tissue densification between the right diaphragmatic hemi-dome and the right hepatic lobe, along with smaller similar lesions in the left hypochondrium and the right iliac fossa. The right ovary displayed a globular and heterogeneous appearance. Additional investigations, including endoscopic studies, thyroid ultrasound, mammography, and breast ultrasound, revealed no pathological findings. A pelvic endovaginal ultrasound identified a pre-existing polymyomatous uterus.

A biopsy guided by CT of the suspicious perihepatic lesion was performed. Subsequent anatomopathological analysis documented endometrial-type stroma with no signs of malignancy.

Discussion: The diagnosis of endometriosis mimicking peritoneal carcinomatosis was established. Abdominopelvic endometriosis may present imaging findings that do not unequivocally exclude peritoneal malignancy. This case emphasizes the importance of heightened awareness and clinical suspicion, coupled with a multidisciplinary approach and meticulous diagnostic procedures for accurate and effective management.

Keywords: *extrapelvic endometriosis, peritoneal carcinomatosis, diagnostic challenge*

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[Abstract:1570]

CARBAMAZEPINE ASSOCIATED DRESS SYNDROME: A RARE DRUG HYPERSENSITIVITY REACTION

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The Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS) syndrome is a rare drug reaction characterized by acute-onset fever, skin rash, and multisystem involvement, posing a life-threatening condition. The most common cutaneous reaction secondary to use of anticonvulsant drugs is maculopapular eruptions. The anticonvulsant drug carbamazepine can rarely lead to serious cutaneous adverse reactions such as Steven's Johnson syndrome, toxic epidermal necrolysis and, even less frequently, DRESS syndrome.

A 45-year-old male patient with epilepsy was admitted with fever and systemic rash one week after he was prescribed carbamazepine. Rash was initially on the lower and upper extremities but had spread to the trunk shortly after. Physical examination revealed erythematous papular plaques on the scalp, periorbital erythema, widespread erythematous pruritic plaques involving almost the entire anterior and posterior trunk, arms, and non-blanching erythematous papules and plaques from the ankles to the femoral region (Figures 1, 2, 3). Oral mucosa was spared. There was no lymphadenopathy. His treatment included steroids and antihistamines. Carbamazepine was switched to levetiracetam. Laboratory investigations showed eosinophilia of 3000/microL and elevated creatinine levels. Liver function tests were normal and there was no abnormality on abdominal ultrasonography. Skin biopsy was consistent with a "cutaneous drug reaction". Based on extensive skin findings, fever, and eosinophilia, the patient was diagnosed with DRESS syndrome.

Although rare DRESS syndrome, a delayed-type drug hypersensitivity reaction, can be life-threatening. In patients presenting with fever and widespread skin rashes along with a history of drug use, consideration should be given to the differential diagnosis of this condition.

Keywords: *fever, rash, carbamazepine, DRESS syndrome*

Figure 1.

Figure 2.

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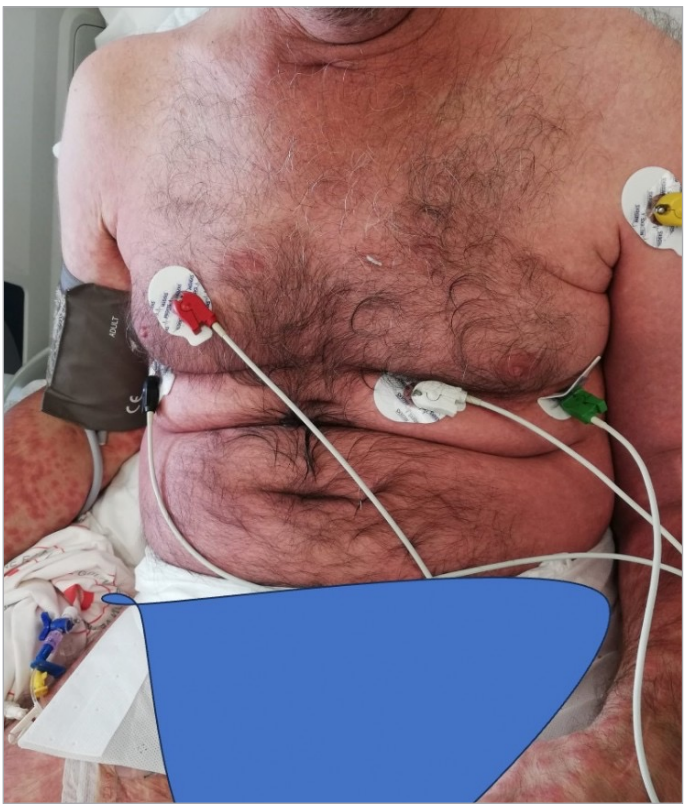

Figure 3.

[Abstract:1571]

ANALYSIS OF USE OF THE BIOSIMILAR OF ENOXAPARIN SODIUM

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We have carried out a descriptive study to analyze the safety and presence of complications of the new available biosimilar of enoxaparin sodium. We carried out the study of all patients with a diagnosis of 'Complications related to Anticoagulation' both in the first quarter of 2018 and 2019. We ultimately analyzed 5 patients in 2018 with commercial enoxaparin sodium and 6 patients in 2019 who received the new biosimilar enoxaparin sodium and presented an episode of major bleeding as a complication. In the analysis of the results of these patients, we observed overall that complications of bleeding due to enoxaparin occurred in a similar number (5 cases in 2018 VS 6 cases in 2019), taking into account that the number of admissions and prevalence of patients who received enoxaparin during those months was similar. The average age was 72.36 years. The majority occurred in Internal Medicine (63%). With regards to enoxaparin dose used, 90.9% therapeutic doses (mg/kg/12h) 36.3% required dose adjustment. The location of the hematoma was 54% in the abdominal wall, 36% in legs and 10% in arms. 27% had related exitus, coinciding that 100% of them were located in the abdominal wall. 18% required admission to the ICU, and 63.6% required transfusion of blood products. 27.2% were prescribed antiplatelet agents. We can approximate that there is no clear increase in the bleeding rate with the biosimilar, although the results are not significant due to the low number of patients analyzed. The most serious bleeding occurred, in all the cases analyzed, with the new enoxaparin biosimilar.

Keywords: *enoxaparin, hematoma, bleeding, complications*

[Abstract:1622]

EPIDEMIOLOGY OF OSTEOPOROTIC HIP FRACTURES IN A REGIONAL HOSPITAL

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Purpose: To describe the epidemiological characteristics of hip fractures in patients admitted to a regional hospital.

Methods: Retrospective, observational study including all patients aged 45 years or more with acute hip fracture admitted to our hospital during one year. We excluded patients with pathological fractures and those due to a severe trauma. Data collected included age, sex, place of residence, type of fracture, previous hip fracture, postsurgical complications and mortality. The data were analyzed using IBM Statistics SPSS 21.

Findings: There were 106 cases reported (29 men -27.4%- and 77 women -72.6%-. Mean age was 86 years (range 55-106). 64.2% lived at home and 34.9% in a nursing home. A previous fracture was reported in 21 patients. The mean type of fracture was pertrochanteric (46.2%), followed by subtrochanteric (9.4%), diaphysiary (5.7%) and capital (2.8%). Surgical repair or replacement was required in most cases (51.9% osteosynthesis and 37.7% prosthesis). Postoperative complications were observed in 58 patients, most frequent were cardiorespiratory failure (48.1%) and infections (30.8%). Overall mortality was 21.7%, and 43% within the six months after discharge.

Conclusions: The incidence of osteoporotic hip fractures increases exponentially with aging, being the most important factor in terms of death, functional dependence, and social cost. Estimation of risk of hip fracture, lifestyle interventions and properly drug therapies for the treatment and prevention of osteoporosis, especially in elderly patients, may reduce these adverse outcomes.

BIBLIOGRAPHY:

1. Registro Nacional de Fracturas de cadera por fragilidad año 2019. http://rnfc.es/wp-content/uploads/2020/09/Informe-2019-por-hospitales.pdf.

Keywords: *osteoporosis, hip fracture, elderly*

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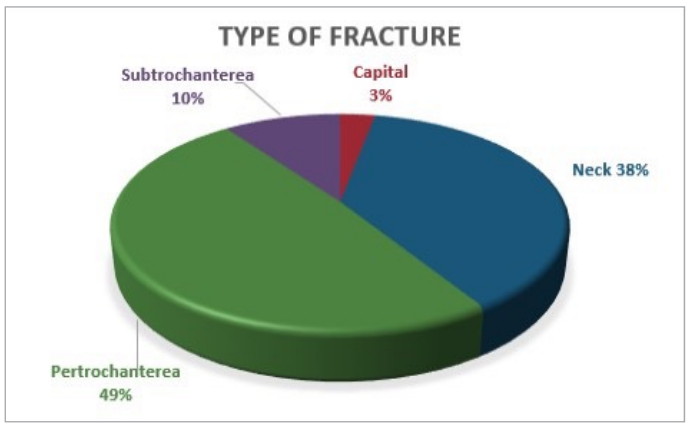

Figure 1.

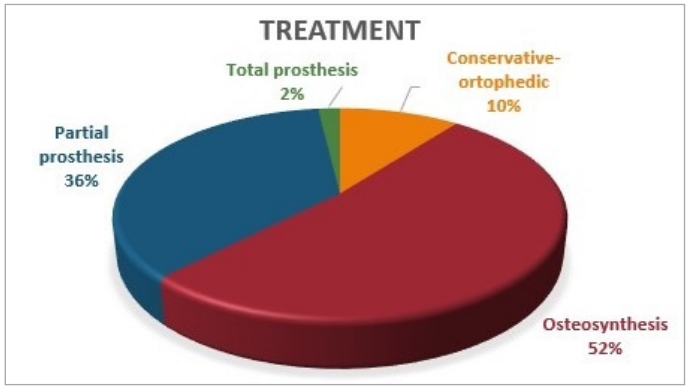

Figure 2.

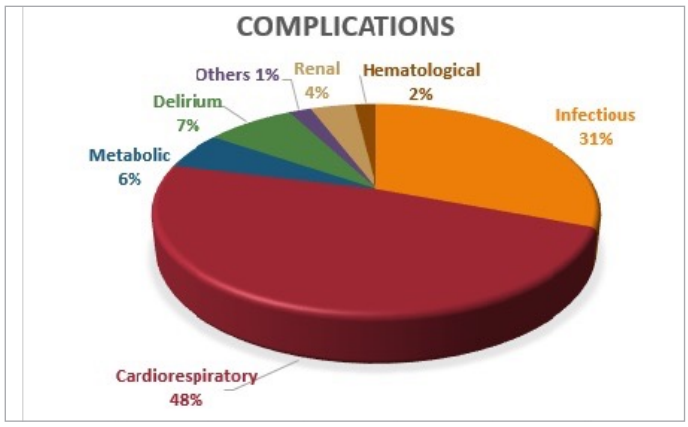

Figure 3.

Figure 4.

[Abstract:1675]

UNEXPECTED COMPLICATIONS

Itziar Montero Diaz[1], *Pedro Manuel Espacio Santos*[2], *Álvaro Santaella Gómez*[1]

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Case Presentation: We present the case of a 77-year-old male with multiple pathologies, notably chronic obstructive pulmonary disease (COPD) with chronic respiratory acidosis.

He presented with dyspnea on minimal exertion along with cough and expectoration. Upon physical examination, the patient was tachypneic, sweaty, hypotensive, and oligoanuric. Pulmonary auscultation revealed moist crackles up to bilateral mid-lung fields.

Notable complementary tests included an arterial blood gas analysis indicating respiratory acidosis. After confirming these results, the patient required non-invasive mechanical ventilation with a good evolution of gasometric parameters.

After two days in the hospital ward, the patient developed arterial hypotension, tachycardia, tympanic abdomen with signs of peritoneal irritation, leading to an abdominal CT scan (Figure 1) revealing massive pneumoperitoneum with involvement of intestinal loops. The patient was referred to General Surgery, undergoing an exploratory laparotomy, without observing perforation of a hollow viscus, with clinical improvement after laparotomy scar closure.

On the fifth postoperative day, the patient again experienced abdominal distension and extensive subcutaneous emphysema (Figures 2 and 3), diagnosed with barotrauma secondary to non-invasive mechanical ventilation.

Discussion: Pulmonary barotrauma can result from a complication of mechanical ventilation. It occurs due to alveolar rupture caused by elevated transalveolar pressure, leading to conditions such as pneumothorax, pneumoperitoneum, and subcutaneous emphysema.

Pneumomediastinum, pneumoperitoneum, and subcutaneous emphysema in these patients are usually self-limiting and are managed with a reduction in ventilator pressures, monitoring, and supportive measures. This is not the case for pneumothorax, which often requires chest tube drainage for resolution.

Keywords: *barotrauma, non-invasive, ventilation*

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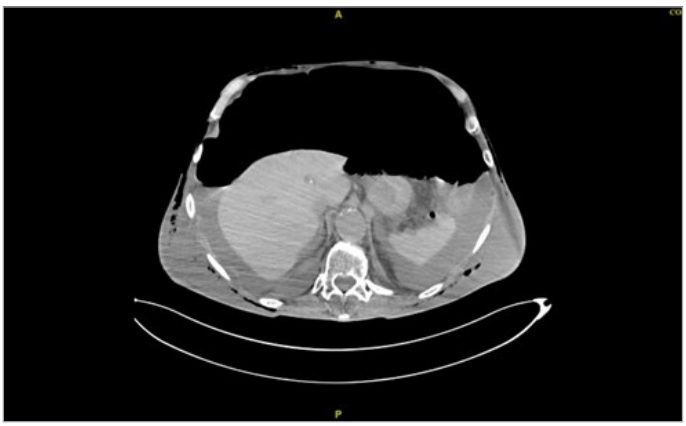

Figure 1. Massive pneumoperitoneum.

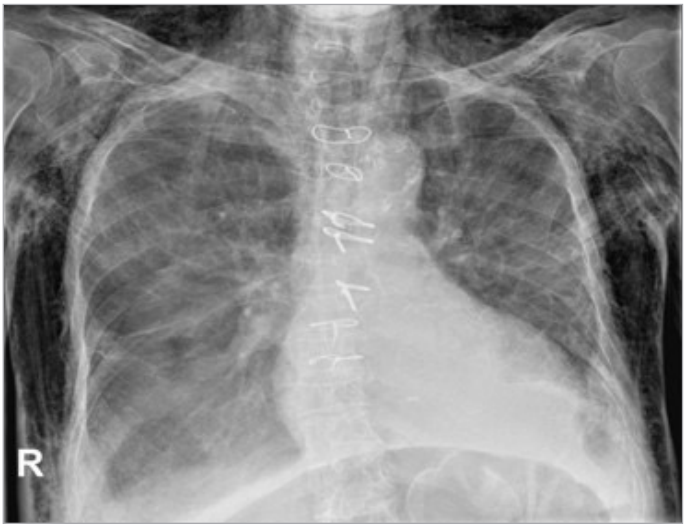

Figure 2. Generalized subcutaneous emphysema on a chest X-ray.

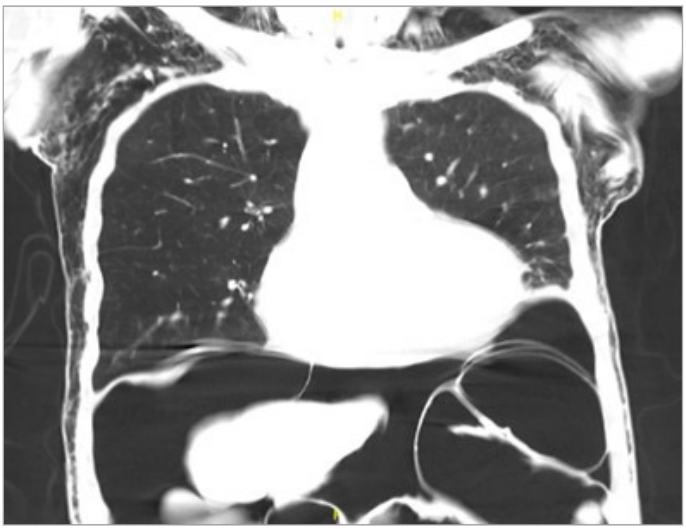

Figure 3. Subcutaneous Emphysema Visualized on CT Scan.

[Abstract:1696]

ASSESSMENT OF PRURITIC SKIN LESIONS

Irene Gil Hernando[1], *Alba María García Alabarce*[1], *Antonio Torres Gómez*[2], *María Teresa López Plana*[1], *María Del Carmen Martínez Delgado*[1]

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A 73-year-old patient with bronchial asthma, arterial hypertension, hyperuricaemia and osteoarthritis started with erythematous, pruritic, itchy, papular lesions, starting on the upper limbs and later spreading to the lower limbs, trunk and face. His family physician prescribed dexchlorpheniramine, which significantly improved the pruritus.

He was admitted to the emergency department for assessment, since over the following three days, although the pruritus improved, the number of lesions increased (Figure 1, 2 and 3), becoming more confluent and associated with lower lip oedema.

The patient had not recently started any new medication.

Initial laboratory tests showed acute renal failure. The other complementary tests (systematic urine analysis and chest X-ray) were normal.

The patient was admitted to internal medicine department. Investigating the clinical history, he had increased the dose of allopurinol from 100 to 300 mg a few weeks ago, so we suspected allopurinol toxicity, and suspended the treatment. After performing a skin biopsy, treatment was started with systemic corticosteroids (1 mg/kg/day) with rapid improvement of the lesions.

One month later, the patient was reviewed in outpatient department with total resolution of the lesions after discontinuation of allopurinol. Pathological anatomy revealed findings of vascular degeneration with subepidermal oedema and perivascular lymphocytic infiltrate with eosinophils, findings suggestive of toxicoderma.

Toxicoderma are defined as reactions in the skin and mucosal caused by various substances, usually drugs. Adverse drug reactions are relatively common, with skin manifestations being the most common, and although they are generally benign and self-limiting, in some cases they can be severe.

Keywords: *erythematous-papular lesions, pruritus, allopurinol, toxicoderma*

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Figure 1.

Figure 2.

Figure 3.

[Abstract:1750]

AN INFREQUENT CAUSE OF MYOPATHY

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

Inflammatory myopathies are due to an activation of the immune response at the muscular level in genetically predisposed individuals with possible exposure to toxins, drugs, trauma or infections.

Autoimmune necrotizing myopathy (ANM) constitutes 20% of myopathies, is severely affected and can be resistant to corticosteroids. Specific antibodies include anti-HMGCR antibodies, initially associated with statin myopathy.

A 69-year-old woman with a history of hypertension and ischemic stroke, under treatment with telmisartan, ASA and atorvastatin. She consulted for clinical symptoms of progressive muscle weakness of proximal predominance that began three months after starting treatment with statins with elevated CPK and transaminases. The EMG is compatible with severe active myopathy. Muscle biopsy was compatible with necrotizing myositis with a probable autoimmune basis given the overexpression of MHC-I, confirmed by anti-HMGCR positivity, establishing the diagnosis of ANM secondary to statins. Treatment with prednisone was started with little response. Azathioprine and intravenous immunoglobulins were added with good evolution.

The HMGCR enzyme is an essential glycoprotein in cholesterol synthesis, and the mechanism of action of statins is the inhibition

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of this enzyme. By an unknown mechanism, statins cause overexpression of HMGCR and appearance of anti-HMGCR. It presents with progressive, proximal and symmetrical muscle weakness.
Clinical and analytical criteria, electromyographic data describing myopathy and biopsy of the affected muscle showing necrosis, presence of macrophages and overexpression of MCH-I are used for diagnosis.

Keywords: *statins, anti-HMGCR antibodies, autoimmune necrotizing myopathy*

[Abstract:1754]

A DESCRIPTIVE STUDY OF THE RAPID DIAGNOSTIC UNIT (RDU) AT RÍO HORTEGA HOSPITAL

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Our objective is to analyze how the RDU works at Rio Hortega Hospital and the characteristics of the patients treated.
We made a retrospective descriptive observational study of patients seen at the RDU in 2022. We analyzed sex, age, reason for referral, time elapsed between appointment request and first consultation, different symptoms, complementary studies, final diagnosis, time between first consultation and final diagnosis with the referred Service. To analyze data, SPSS 23 was used.
Among the patients, 53% were women and 46% male. The mean age was 63. The most frequent reasons for referral (figure 1) were weight loss 24%, lymphadenopathy 15%, anaemia 12.5% and digestive symptoms 12%. The average time from the first contact at RDU was 48h.
The most common symptoms were weight loss 53%, gastrointestinal symptoms 50% and asthenia 45%. As diagnostic tests, 94% blood tests were made as well as 67% CT scans.
Benign digestive pathology was the most frequent diagnosis (figure 2) with 17%, then solid neoplasms 14% and benign tumors 12%. The mean time between first consultation and diagnosis was 21 days, being 11 days on neoplasms. Most patients were referred to Digestive Service (11%), Haematology (5%), Pneumology (5%) or Oncology (4.5%). The mean time between diagnosis and referral to the correct unit was 26 days, being shorter in oncologic patients with 8 days.
In conclusion, the RDU has enabled early diagnosis of severe pathologies. It is an effective alternative to hospitalization for the early diagnosis of potentially serious pathologies.

Keywords: *rapid diagnostic unit, ambulatory, malignant diseases*

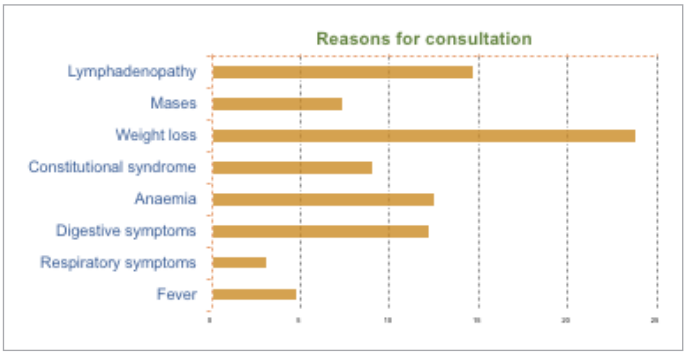

Figure 1. *Reasons for consultation.*

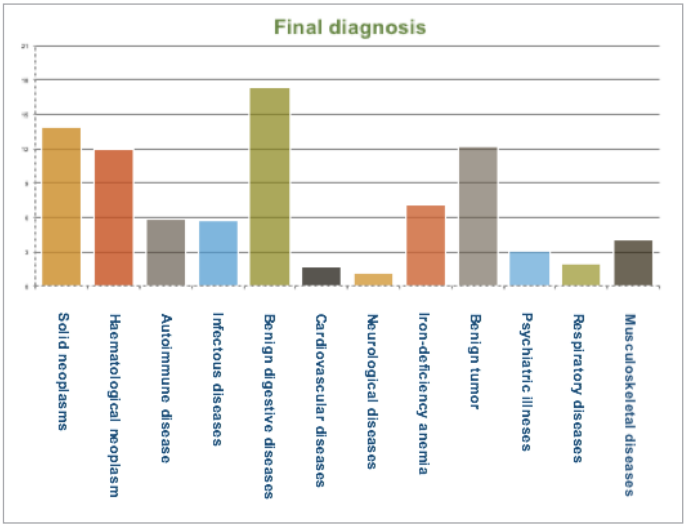

Figure 2. *Final diagnosis.*

[Abstract:1775]

UNKNOWN FEVER - A CHALLENGING DIAGNOSIS

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Introduction: Fever of unknown origin is defined by persistent fever that lasts longer than typical self-limiting courses without an identified focus despite exhaustive investigation. In most cases the diagnosis is not made.
Case Presentation: A 66-year-old woman, with no relevant medical history, went to the Emergency Department with severe asthenia, afternoon fever, weight loss and drenching night sweats, with one month of evolution. Physical examination was normal. The patient had an increasing of inflammatory parameters (40 times the upper limit of normal) with no other significant alterations. Blood and urine cultures as well as autoimmunity study, serologies, protein electrophoresis and a complete metabolic panel were collected, and they showed no significant alterations. Linezolid and

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piperacillin-tazobactam were given for 10 days each and had no clinical or analytical repercussion. Due to the persistency of the fever, a CT scan of chest, abdomen and pelvis was performed as well as a transthoracic echocardiography and the results showed no infectious focus. In order to discover the origin of the fever, the patient underwent a FDG PET scan and revealed a diffuse uptake at medullary and splenic levels. A myelogram was made for further investigation with no significant results. The patient was submitted to a corticosteroid therapy regimen and there was a positive clinical evolution with inflammatory parameters on a decreasing profile and sustained apyrexia.

Conclusions: Most patients with unknown fever remain without an etiologic diagnosis after extensive evaluation. Its diagnosis can be a real challenge.

Keywords: *unknown fever, infectious focus, diagnosis*

[Abstract:1778]

A COMPLICATED CASE OF ACUTE APPENDICITIS

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A 17-year-old woman came to the emergency department with epigastric pain, nausea, vomiting and fever with a duration of 3 days. Laboratory tests showed lymphocytes 0.29 x 10^3/µL, platelets 36 x 10^3/µL, direct bilirubin 2.38 mg/dl, ALP 252 U/L, GGT 180 U/L, AST 99 U/L, ALT 50 U/L and C-reactive protein 297 mg/dl. Abdominal ultrasound showed splenomegaly and hepatomegaly.

After 48 hours, the fever and abdominal pain persisted. A further blood test showed levels of procalcitonin 19 ng/mL and D-dimer 5,431 ng/mL. Computed tomography (CT) showed acute appendicitis and acute superior mesenteric vein thrombosis. Urgent surgery was carried out.

However, the patient continued with daily fever and worsening cholestasis. A follow-up CT revealed new findings such as thrombosis of several portal branches, incipient hepatic abscesses, dilatation of the intrahepatic and extrahepatic bile duct, as well as progression of the superior mesenteric vein thrombosis (Figure 1). Consequently, the dose of enoxaparin was increased guided by antiXa level. Antibiotic therapy was upgrade from piperacillin-tazobactam to meropenem and trimethoprim/sulfamethoxazole was added due to the detection of Stenotrophomona maltophilia in the removed drainage culture. Because of thrombosis and recent surgery, the patient developed symptoms of paralytic ileus requiring nasogastric tube, prokinetics and parenteral nutrition.

After 10 days, she presented clinical and analytical improvement and a liver Magnetic Resonance Imaging (MRI) showed partial resolution of the hepatic abscesses. On discharge she continued with oral trimethoprim/sulfamethoxazole and cefixime as well as enoxaparin with favorable clinical course.

Keywords: *superior mesenteric vein thrombosis, acute appendicitis, pylephlebitis*

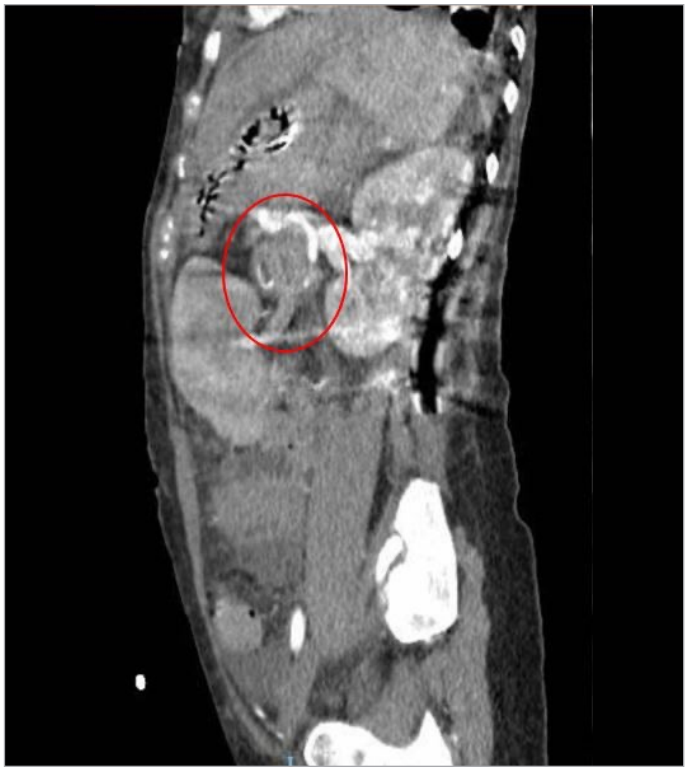

Figure 1. *Superior mesenteric vein thrombosis. Extensive thrombosis is shown with a red circle.*

[Abstract:1816]

UNRAVELING SPERMIOGENESIS DEFECTS THROUGH ARP2/3 DYNAMICS IN HIPERCHOLESTEROLEMIC RABBITS

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Obesity and hypercholesterolemia significantly impact male reproductive health, leading to a decline in seminal quality. The testicles are pivotal in testosterone production and sperm development regulation, rendering them highly vulnerable to heightened lipid levels. This susceptibility may result in fertility issues, including sperm malformation and membrane cholesterol elevation. The final shape of spermatozoa depends on intricate processes involving actin filaments (acroplaxome)

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and microtubules (manchette) anchored to plasma membranes. By examining Actin Related Protein 2/3 (Arp2/3) and tubulin localization in testes from normal and dyslipidemic rabbits, the research aims to understand how a high cholesterol environment adversely affects sperm cytoskeleton proteins, leading to morphological abnormalities during spermiogenesis.

Immunostaining unveiled unique patterns of Arp2/3 expression at different stages within the seminiferous epithelium of control animals, following the dynamic changes in cell shape. Irregularities in Arp2/3 localization were notably observed in round spermatids of animals under a high-fat diet (HFD). Quantitative analysis revealed no significant differences in protein expression levels between groups or testicular stages. 3D reconstruction highlighted altered protein distribution in HFD spermatids.

Our results show that HFD affects the disposition of Arp2/3 and tubulin in germ cells, potentially contributing to documented sperm malformations. Using a rabbit model, the study extends beyond animal experimentation to address human implications, specifically in diagnosing idiopathic male infertility by studying sperm conformation during spermiogenesis. This research unveils complex links between lipid stress, cytoskeletal dynamics, and male reproductive health, laying the foundation for targeted interventions and enhanced diagnostics amid the growing global fertility challenge.

Keywords: *dyslipidemias, andrology, spermatogenesis, sperm morphology, cytoskeleton, ARP2/3*

[Abstract:1852]

SIDE EFFECT OF LAMOTRIGINE

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A 54-year-old woman with depressive syndrome in treatment with lamotrigine was admitted to Internal Medicine for generalised exanthema.

She had started ten days earlier with facial oedema and oral aphthae, subsequently developing pruritic erythematous lesions on the palms and soles with progression along the trunk, upper limbs, neck and chin. Five days earlier, she presented a dry cough and laterocervical adenopathies that returned spontaneously. Eleven days before she had increased her usual dose of lamotrigine by 25 mg. She denied risky sexual relations.

The physical examination revealed maculopapular exanthema that covered the neck, chin, trunk, knees, upper limbs, palms and soles. There was a minimal rash on the lips, with no lesions in the oral cavity.

Renal function, liver profile, C-reactive protein and haemogram were normal. The nasopharyngeal swab did not detect the presence of respiratory viruses. Serology (hepatitis B and C virus, cytomegalovirus, Epstein Barr, herpes simplex, varicella zoster, human immunodeficiency virus, treponema pallidum, toxoplasma, mycoplasma pneumoniae, mumps, rubella, measles and parvovirus B19) and quantiferon were negative. Skin biopsy was compatible with exanthema of viral or drug-induced origin.

The negative serology results made viral exanthema unlikely. The patient evolved favourably after discontinuation of lamotrigine and treatment with systemic corticosteroids.

The appearance of mild or severe skin lesions with the use of Lamotrigine is not uncommon: it is one of the main causes of treatment discontinuation. Early diagnosis of skin reactions is essential to avoid complications, so this entity should be considered in the differential diagnosis of exanthematous skin lesions.

Keywords: *lamotrigine dosage, maculopapular exanthema, pruritic erythematous lesions*

Figure 1. *Exanthema in palms.*
Maculopapular exanthema that covered palms.

Figure 2. *Exanthema in soles.*
Maculopapular exanthema that covered soles.

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Figure 3. Exanthema in the neck.
Maculopapular exanthema that covered the neck.

[Abstract:1857]

WHILE THE CALM LASTS: COPING WITH DEATH STRATEGIES AND QUALITY OF LIFE EVALUATION IN MEDICAL STUDENTS

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Objectives: To analyze "Coping with Death Strategies" and "Quality of Life" of some medicine university students before starting their work activity.

Methods: Descriptive observational study on fifth-year medical students using an anonymous survey with a sociodemographic-educational profile questionnaire, Bugen's Coping with Death Scale (CDS) and the Professional Quality of Life scale that analyzes Burnout (BOS) and Fatigue Compassion (FC) risk as Compassion Satisfaction Predisposition (SC).

Results: 73 students answered, mostly women (73%), aged 23, without any specific training in strategies to deal with suffering or death or in emotional management (58.9%, 50.7%). 41.1% performed meditation sporadically. 47.9% had attended psychological therapy; 77.14% considered it useful. 20.5% had adequate CDS. 68.5% had high predisposition to CS. 31.6% and 36.5% had low risk of CF and SBO. A positive correlation was observed between CDS and SC and an indirect correlation with BO and CF. We evidenced positive correlation between FC and BO; and negative between BO and SC.

Conclusions: The medical students surveyed were mostly women, with limited strategies to deal with death, suffering, or emotional management. They presented neutral CDS, as well as medium risk to BO and FC and predisposition to SC. We observed direct correlation between CDS and SC, as between FC and BO. There was indirect correlation between CDS with FC and BO; and between BO with SC. It is essential to organize early detection and intervention programs in these future professionals to avoid subsequent physical and psycho-emotional wear and tear written in the bibliography.

Keywords: *quality of life, coping with death, student*

		Medicine Student (n=73)
Age		23 years (IQR 2)
Gender	Women Men	74% (54) 26% (19)
Training to face death and suffering	None Informal Training Accredited training	58.9% (43) 31.5% (23) 9.6% (7)
Training in emotional management	None Informal Training Accredited training	50.7% (37) 43.8% (32) 5.5% (4)
Performing meditation	Never Sporadically Frequently	49.3% (36) 41.1% (30) 9.6% (7)
Psychological therapy	No Yes	52.1% (38) 47.9% (7)
Utility of psychological therapy	Yes, I consider that it helped me I don't think it helped me	77.1% (27) 22.9% (8)
Bugen scale total score		126.52 pt (Dt 22.83)
Coping strategies (bugen scale)	APPROPRIATE Strategies NEUTRAL Strategies INADEQUATE Strategies	20.5% (15) 74% (54) 5.5% (4)
SC Total Score FC Total Score BO Syndrome Total Score		43 pt (IQR 2) 25.26 pt (Dt 5.37) 24.63 pt (Dt 5.30)
SC Predisposition	HIGH predisposition MEDIUM predisposition LOW Predisposition	68.5% (50) 31.5% (23) 0%
FC Risk	HIGH risk MEDIUM risk LOW risk	0% 68.5% (50) 31.5% (23)
BO Syndrome Risk	HIGH risk MEDIUM risk LOW risk	0% 64.4% (47) 35.6% (26)

Table 1. Summary of results.
Differential characteristics Sociodemographic-psychosocial profile, Coping strategies in the face of death and Quality of professional life in Medical Students (5th Year) IQR: Interquartile range. Point: Points. Dt: Typical Deviation. SC: Compassion satisfaction. FC: Compassion Fatigue. BO: Burnout syndrome.

[Abstract:1863]

SEVERE BRADYCARDIA AFTER IRON CARBOXYMALTOSE ADMINISTRATION, UNDESCRIBED SIDE EFFECT?

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Case Report: The patient was a 82-year-old female without previous cardiological history who was undergoing an outpatient study due to microcytic anemia and severe hypochromia that required transfusion and constitutional syndrome, referred to the Care Continuity Unit (UCA) for treatment with intravenous iron. During the infusion of iron carboxymaltose 1 g, there was a warning of progressive bradycardia up to 38 bpm although the patient was completely asymptomatic. Several ECGs were performed suggesting slow atrial fibrillation with nodal leaks vs complete atrioventricular block, compatible with sinus dysfunction. Based on these results, UCI and cardiology department recommended

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to evaluate permanent pacemaker implantation, which was finally placed 2 days later. The patient went to an allergy consultation after 20 days to have a skin prick test and intradermal iron carboxymaltose tests performed, which were negative. The carboxymaltose iron tolerance test showed tolerance up to doses of 1 g.

In the technical specifications for iron carboxymaltose, the following cardiac and vascular adverse effects appeared hot flashes and hypertension (common), tachycardia and hypotension (uncommon) presyncope, syncope and phlebitis (rare), Kounis syndrome (frequency not known and not reported post-marketing).

This case describes a patient who developed severe bradycardia during the administration of an infusion of iron carboxymaltose, which is not described as a side effect in a patient without cardiological history and previous ECG in sinus rhythm.

After what has been explained in this case, it would be advisable to take special caution in the administration of high doses of intravenous iron, especially in low weight patients.

Keywords: *iron carboxymaltose, bradycardia, adverse reaction*

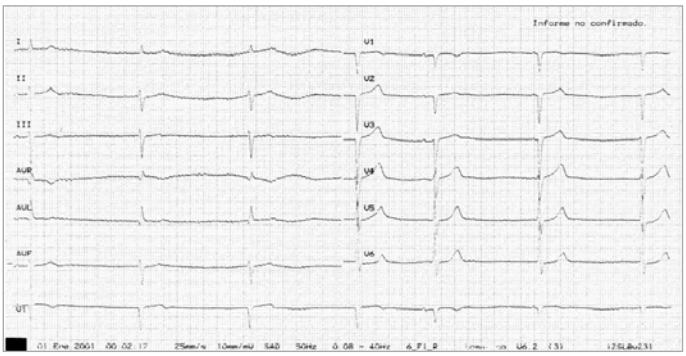

Figure 1. *Post-infusion electrocardiogram. Asymptomatic. 20-10-22 11:00.*

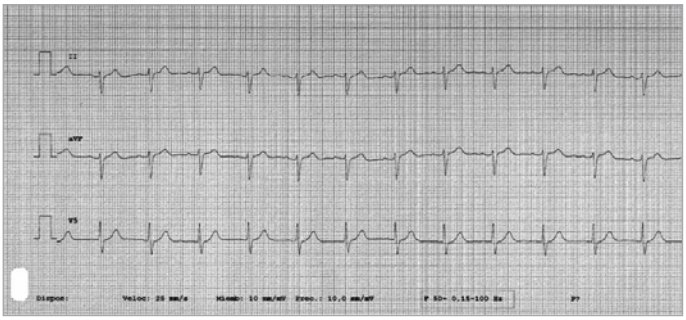

Figure 2. *Pre-infusion electrocardiogram. Asymptomatic. 20-10-2022. 09:38.*

[Abstract:1865]

EVALUATION OF LOW SERUM ALT LEVEL IN HOSPITALIZED PATIENTS UNDER 65 YEARS OF AGE

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Serum ALT level is a laboratory parameter used in diagnosis and follow-up of patients. Destruction of the liver and the muscle is related with ALT elevation. However, less is known about low ALT level. Low ALT levels may reflect process of aging and may be a significant clinical predictor of mortality of the elderly. We aim to learn whether low-normal ALT values are associated with mortality in patients who were hospitalized in our hospital's internal medicine clinic.

Four-year mortality rates for 943 patients including 508 females and 435 males who were hospitalized in internal medicine clinic were analyzed. Their medical history and their laboratory parameters were recorded using the hospital data. Patients who had ALT levels greater than the average ALT level of the hospital which was measured to be 35 U/l, patients who had chronic liver disease and malignities were eliminated from the study.

The patients who died had statistically significant low ALT values (16.22±7.50 14.79±7.30 p: 0.003, respectively). It was demonstrated that in patients who were older than 65, the factor who affected mortality was advanced age. It was documented that in patients who were 65 years old or younger, ALT levels lower than 9.5 U/l increased the mortality rate independent of the patients' ages (P: 0.002).

Considering the low normal ALT level in patients under 65 years of age, it can be predicted that the cause should be evaluated and followed up.

Keywords: *hospitalization, Alanine aminotransferase, evaluation*

Diabetes Mellitus	138	35.40%	140	31.30%	<0.213
Solid Tumors	12	2.80%	51	10%	<0.001
Metastatic Solid Tumors	1	0.02%	43	8.40%	<0.001
Chronic Renal Fialure	98	22.70%	245	47.90%	<0.001
Chronic Heart Failure	66	15.30%	161	31.40%	<0.001
Coronary Artery Disease	96	22.30%	147	28.70%	0.024
Chronic Obstructive Pulmonary Disease	37	8.60%	78	15.20%	0.02
Peripheric Artery Disease	8	1.90%	27	5.30%	0.006
Cerebrovascular Events	23	5.30%	63	12.30%	<0.001
Connective Tissue Disease	27	6.30%	10	2%	0.001
Leukemia	2	0.50%	10	2%	0.042
Lymphoma	5	1.20%	13	2.50%	0.123
Hypertension	164	38.10%	256	50%	0.001

Table 1. *Disease types of patients in the study.*

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	n	Variable	Survivor	Ex	P value
Female/Male	243/188		265/247		0.156
Age	57.53	±17.90	73.42	±13.05	<0.001
GGT (U/L)	39.47	±43.93	58.22	±80.77	<0.001
LDH (U/L)	249.44	±172.17	292.11	±199.61	<0.001
ALT (U/L)	16.22	±7.50	14.79	±7.30	0.003
ALP (U/L)	90.76	±42.65	116.7	±91.91	<0.001
AST (U/L)	21.85	±12.65	25.61	±23.98	0.002
Hemoglobin	10.91	±2.54	10.18	±2.11	<0.001
WBC (per mm3)	8359	±4355	11259	±21240	0.003
Sedimentation (mm/Hr)	38.59	±30.20	47.61	±31.93	<0.001
Albumin (g/L)	3.51	±0.59	3.1	±0.63	<0.001
CRP (mg/l)	48.7	±75.00	76.23	±78.79	<0.001

Table 2. Characteristics and biochemical parameters of the study patients.

	Survivor	Ex	ALT	Median
ALT 1 quartile n (25%)	88 (20.4%)	147 (28.7%)	7.45	(3.00-9.43)
ALT 2 quartile n (26-50%)	113 (26.20%)	123 (24%)	12.00	(9.5-14.00)
ALT 3 quartile n (51-75%)	106 (24.60%)	130(25.4%)	16.97	(14.00-19.88)
ALT 4 quartile n (76-100%)	124 (28.8%)	112 (21.9%)	25.817	(19.89-35.00)

Table 3. Categorization of study patients by ALT levels (low to high). Four Categories First 25% and others 26-100%.

[Abstract:1880]

RETROSPECTIVE ANALYSIS OF PATIENTS WITH SUSPECTED NONCONVULSIVE STATUS EPILEPTICUS IN A TERTIARY HOSPITAL

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Objective: To analyse the characteristics of patients with nonconvulsive status epilepticus (NCSE) and those with diffuse non-specific encephalopathy (DNSE).

Methods: Observational analytical study of electroencephalogram (EEG) requests for suspected NCSE in patients hospitalised in the internal medicine unit of a tertiary level hospital between January 2018 and May 2018, as well as their medical records. Comparative analysis between patients with electroencephalographic findings of NCSE and DNSE using IBM-SPSS v.26 software.

Results: 24 cases of NCSE (61.54%) and 15 cases of DNSE (38.46%) were confirmed. Mean age was slightly higher in the DNSE group, and both groups were predominantly female. Dementia and structural neurologic disorders were more present in the DNSE group. However, chronic treatment with psychotropic drugs was more present in patients with NCSE. Antibiotic therapy was used in 66.7% of both groups, but use of cefepime and quinolones was higher in the NCSE group. Ionic disturbances were slightly more frequent in patients with NCSE as well as impaired renal function. Negative symptoms were slightly more frequent in the DNSE group and positive symptoms in NCSE. The positive clinical response rate was quite similar in both groups, although the exit rate was higher in NCSE one. However, in none of these analyses was statistical significance found.

Conclusions: Although the data suggest a possible association between certain variables and the development of NCSE, no statistical significance was found for any of the variables studied, which is probably related to the small sample size of our study.

Keywords: *nonconvulsive, status, encephalopathy*

	NCSE	DNSE	P value
Sample size	N = 24	N= 15	
Mean age	73.8	78.2	0.0675
Sex			0.437
Male	7 (29.2%)	2 (13.3%)	
Female	17 (70.8%)	13 (86.7%)	
Personal history of epilepsy	4 (16.7%)	2 (13.3%)	1
Personal history of dementia	5 (20.8%)	5 (33.3%)	0.384
Personal history of CNS structural abnormalities	6 (25%)	6 (40%)	0.323
Usual home treatment with psychotropic drugs	12 (50%)	6 (40%)	0.542
Usual home treatment with selective serotonin reuptake inhibitor (SSRI)	8 (66.6%)	2 (33.3%)	0.263
Antibiotic treatment on admission	16 (66.7%)	10 (66.7%)	1
Cefepime	9 (37. 5%)	2 (13.2%)	0.150
Quinolones	4 (16.7%)	1 (6.7%)	0.631
Presence of systemic infection	15 (62.5%)	8 (53.3%)	0.571
Ionic disturbances	14 (58.3%)	7 (46.7%)	0.477
Hypercalcaemia	3 (12.5%)	4 (28.6%)	0.387
Hypocalcaemia	2 (8.3%)	2 (14.3%)	0.616
Hyperkalaemia	6 (25%)	0	0.067
Hypokalaemia	5 (20.8%)	3 (21.4%)	1
Impaired renal function (GFR<40)	13 (54.2%)	6 (40%)	0.389
Impaired liver function	7 (29.2%)	4 (26.7%)	1
Impaired level of consciousness	24 (100%)	12 (80%)	0.050
Negative symptoms (aphasia, amnesia, catatonia)	18 (75%)	12 (80%)	1
Positive symptoms (myoclonias, nystagmus, automatisms)	13 (54.2%)	5 (33.3%)	0.204
EEG monitoring	17 (70.8%)	1 (6.7%)	
Electroencephalographic improvement	12 (70.6%)	1 (100%)	
Worsening or absence of electroencephalographic changes	5 (29.4%)	0	
Positive clinical response	14 (58.3%)	8 ((53.3%)	0.756
Exitus	14 (58.3%)	7 (46.7%)	0.477

Table 1. Descriptive results obtained.

[Abstract:1882]

JAUNDICE... THE BEGINNING OF SOMETHING MORE

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A 76-year-old woman, recently diagnosed by atrial fibrillation, anticoagulated with acenocumarol was admitted to Cardiac Surgery because of atrial myxoma found, in a transthoracic echocardiogram (TTE) requested to check the condition.

An assessment by Internal Medicine was requested to optimize the patient prior to surgery. Physical examination revealed choluric urine in a catheter bag and cutaneous-mucosal jaundice without stigmata of endocarditis at any level.

Laboratory tests showed hyperbilirubinemia, bilirubinuria, no signs of hemolysis, normal liver tests and lipids profile, leukocytosis

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with left deviation and 50,000 platelets with normal coagulation. Reviewing the clinical history, the patient was previously anticoagulated with acenocoumarol, switching to low-molecular-weight heparin (LMWH) during admission. The platelet count at home was 123000, with a gradual decrease after the introduction of LMWH. We requested consultation with hematology to rule out heparin-induced thrombocytopenia (HIT), abdominal ultrasound and new TTE. Ultrasound showed a 2.8 x 2 cm floating thrombus in the interior of the inferior vena cava near the suprahepatic veins (Figure 1) and in the hematology study a peripheral blood smear was performed without platelet aggregates, confirming the diagnosis of suspicion after the immunological study.

HIT is a complication of heparin use due to an immune-mediated reaction caused by the formation of antibodies against the heparin-platelet factor 4 complex, manifesting as thrombotic events in rare locations in the first fifteen days of treatment. As soon as it is suspected, heparin treatment should be discontinued.

Keywords: *jaundice, thrombus, heparin*

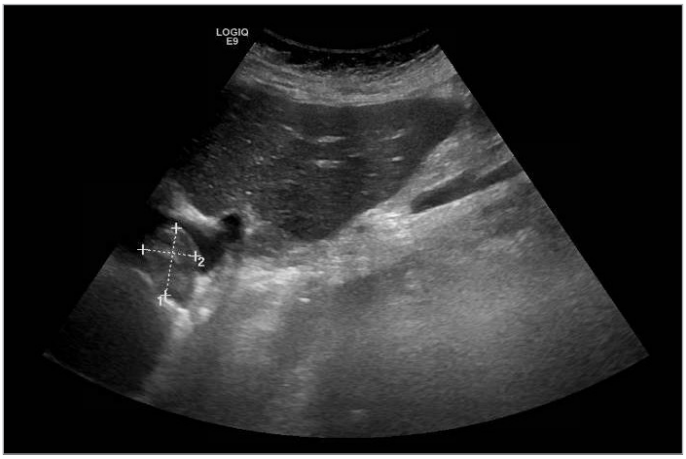

Figure 1.

[Abstract:1899]

CONCOMITANT ELECTROLYTE DISORDERS IN PATIENTS WITH HYPOPHOSPHATEMIA HOSPITALIZED AT AN INTERNAL MEDICINE CLINIC

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Summary: Hypophosphatemia, defined as serum phosphate <2.5 mg/dl, is a significant electrolyte disorder, which is frequently misdiagnosed and inadequately assessed. It is commonly linked to other electrolyte disturbances, resulting in considerable morbidity.

Purpose: Purpose of our study was to investigate the related electrolyte disorders in patients hospitalized with hypophosphatemia.

Methods: A prospective study of 176 patients with hypophosphatemia who were consecutively hospitalized at the 2nd Department of Internal Medicine of University Hospital of Ioannina was conducted. Serum and urine electrolytes of every patient admitted were measured.

Findings: 53.1% of patients with low phosphate levels had at least one accompanying electrolyte disturbance. The most frequent disorder for hypophosphatemic subjects was hypocalcemia (51.7%), followed by hyponatremia (38.6%), hypomagnesemia (23.9%), hypokalemia (21%), hyperkalemia (6.8%), hypermagnesemia (4%), hypercalcemia (3.4%) and hypernatremia (2.8%). Moreover, the multivariate analysis revealed that lower serum calcium (OR 0.64 CI 0.42-0.97 p 0.034) and potassium (OR 0.46 CI 0.25-0.85 p 0.013) levels are risk factors for hypophosphatemia either on admission or during hospitalization.

No statistically significant correlation was found for sodium or magnesium disturbances.

Conclusions: Concomitant electrolyte disorders are frequently met in patients with hypophosphatemia. However, only hypokalemia and hypocalcemia were found to be risk factors for phosphate depletion.

Keywords: *hypophosphatemia, electrolyte disorders, risk factors, hypokalemia, hypocalcemia*

[Abstract:1900]

THE RELATIONSHIP OF VITAMIN D LEVELS WITH HEMOGRAM INDICES AND METABOLIC PARAMETERS IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

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Background: Vitamin D deficiency and Type 2 diabetes (T2DM) are two important health problems that associated with chronic inflammation. Studies have pointed out that vitamin D insufficiency could be linked to T2DM. Inflammatory markers derived from hemogram have also been associated with diabetes and its complications in recent years. Therefore, in our study, vitamin D levels, metabolic markers (i.e., serum uric acid, high-density lipoprotein (HDL) cholesterol, and low-density lipoprotein (LDL) cholesterol) and hemogram indices, were analyzed in well-controlled and poorly controlled T2DM patients. We further compared those variables in vitamin D deficient and non-deficient groups.

Methods: Laboratory data including vitamin D and hemogram markers, compared between poorly and well controlled T2DM patients who visited outpatient internal medicine clinics of our institution.

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Results: The median NLR value was 2.2 (0.74-7.4) in the vitamin D deficient group and 2.02 (0.73-5.56) in the vitamin D normal group (p = 0.025). Among the study parameters, NLR and HbA1c showed a significant positive correlation (r=0.30, p<0.001). There was a significant negative correlation between vitamin D level and HbA1c (r=-0.20, p=0.02). The sensitivity and specificity of NLR in predicting vitamin D deficiency were determined as 60% and 49%, respectively (AUC: 0.59, p=0.03, 95% CI: 0.51-0.67). The sensitivity and specificity of NLR in predicting well control of diabetes were 72% and 45%, respectively (AUC: 0.67, p<0.001, 95% CI: 0.60-0.74).
Conclusions: We think that NLR can be used as an additional tool in follow up of T2DM and vitamin D deficiency.

Keywords: *type 2 diabetes mellitus, inflammation, vitamin D, neutrophil/lymphocyte ratio*

[Abstract:1901]

EVALUATION OF SERUM OXIDATIVE STRESS LEVELS AND ANTIOXIDANT CAPACITY IN PREDIABETES

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Objectives: Prediabetes is a metabolic disorder marked by blood sugar levels that are elevated than usual but not yet high enough to be classified as type 2 diabetes. It is known that raised oxidative stress and insufficient antioxidant status play a role in the pathogenesis of type 1 and type 2 diabetes. In this study, we aimed to measure total oxidative stress and antioxidant status in prediabetic patients and compare them with healthy volunteers.
Materials and Methods: Subjects with prediabetes according to their HbA1c and blood sugar levels in their routine tests were included in the study. The control group consisted of healthy volunteers who visited our clinics for routine health screening and had no health problems. TAS and TOS levels of the groups were compared.
Results: Mean TAS and median TOS values were significantly different among study and control groups (p<0.001 for both). Blood TOS level was a reliable risk factor of prediabetes, taking into account TAS, weight, triglycerides, and GFR.
Conclusions: Higher oxidative stress and lower antioxidant levels were found in prediabetic patients compared to healthy ones. Diabetes development and related complications can be prevented by interventions for these markers in serum.

Keywords: *prediabetes, total oxidative stress, total antioxidant status, type 2 diabetes*

[Abstract:1909]

ASSESSMENT OF LONG-TERM MILD AND MAJOR NEUROCOGNITIVE DISORDERS AFTER OFF-PUMP VERSUS ON-PUMP HEART SURGERY

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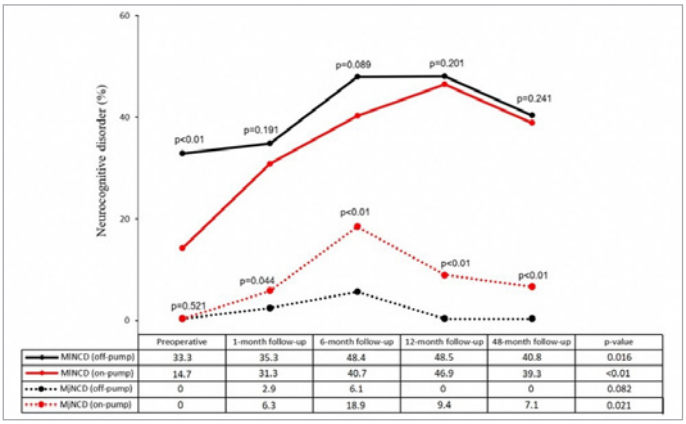
Aim: To assess the presence of long-term mild and major neurocognitive disorders after heart surgery (off-pump vs on-pump) and their associated factors.
Design: Prospective and sequential study on patients who underwent elective heart surgery from May 2011 to April 2012.
Methods: Patients were evaluated for cognitive function and activities of daily living before surgery and at 1, 6, 12, and 48 months postoperatively. Off-pump (n=36) and on-pump (n=34) groups were compared. Surgery-related and clinical factors associated were also evaluated.
Results: The presence of mild and major neurocognitive disorders and the deterioration in activities of daily living was significantly more common in on-pump patients at 6, 12, and 48 months after surgery. Several cardiovascular risk factors and the presence of postoperative neurocognitive disorder at one month were identified as predictors of long-term mild postoperative disorder. Long-term major postoperative disorder was also associated with surgery-related factors.
Conclusions: Patients who underwent on-pump heart surgery were more likely to experience long-term major postoperative neurocognitive disorder and deterioration in activities of daily living than patients who underwent off-pump surgery. Clinical factors were associated with mild postoperative neurocognitive disorder and both surgery-related and clinical factors were associated with major postoperative neurocognitive disorder.
Impact: The nursing team is essential for the correct perioperative identification of neurocognitive disorders and deterioration in activities of daily living in heart surgery.
Patient or Public Contribution: The cognitive function and activities of daily living evaluations should be included as part of the routine perioperative nursing care in heart surgery departments.

Keywords: *activities of daily living, heart surgery, long-term evaluation, major neurocognitive disorder, mild neurocognitive disorder*

 DOI: 10.12890/2024_V11Sup1



	Preoperative	1-month follow-up	6-month follow-up	12-month follow-up	48-month follow-up	p-value
MINCD (off-pump)	33.3	35.3	48.4	48.5	40.8	0.016
MINCD (on-pump)	14.7	31.3	40.7	46.9	39.3	<0.01
MjNCD (off-pump)	0	2.9	6.1	0	0	0.082
MjNCD (on-pump)	0	6.3	18.9	9.4	7.1	0.021

Figure 1. *Percentage of patients with mild and major neurocognitive disorder before off-pump and on-pump heart surgery and at 1, 6, 12, and 48 months postoperatively.*

[Abstract:1928]

SIDE EFFECTS OF ENOXAPARIN. PSOAS HEMATOMA

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Department of Cardiology, Jerez de la Frontera Hospital, Cadiz, Spain

Case Report: A 84-year-old woman with a history of atrial fibrillation, anticoagulated with apixaban was admitted for decompensated heart failure in the context of a respiratory infection. On admission, anticoagulation was changed from oral anticoagulant to intravenous enoxaparin.

On the third day of admission, she presented a syncopal episode with hypotension, profuse sweating, and intense abdominal pain in the left flank. On examination, she showed signs of shock with decreased peristalsis.

Abdominal ultrasound revealed a heterogeneous mass with fluid content in the left flank, with Doppler uptake areas.

AngioCT confirmed a 13x9 cm hematoma in the left flank, at the level of the psoas-iliac muscle with at least 3 foci of contrast extravasation in the late venous phase.

Embolization was ruled out by the interventional radiologist and supportive treatment was chosen due to bleeding of venous origin.

Analytically, significant anemization (hemoglobin 12 g/dl - 7.1g/dl), coagulopathy due to consumption and decrease in fibrinogen levels.

Protamine sulfate administration was discarded due to the time elapsed since the last dose of anticoagulant (more than 6 hours). Treatment was started with 1 red blood cell concentrate, plasma, fibrinogen and vitamin K. That same night, she started again with abdominal pain and hypotension, requiring 2 additional transfusions, serum therapy and analgesia. Despite these efforts, the patient died the following day after receiving palliative sedation; in the context of hemorrhagic shock associated with a psoas hematoma as a consequence of anticoagulation with enoxaparin.

Keywords: *enoxaparin, psoas hematoma, side effects*

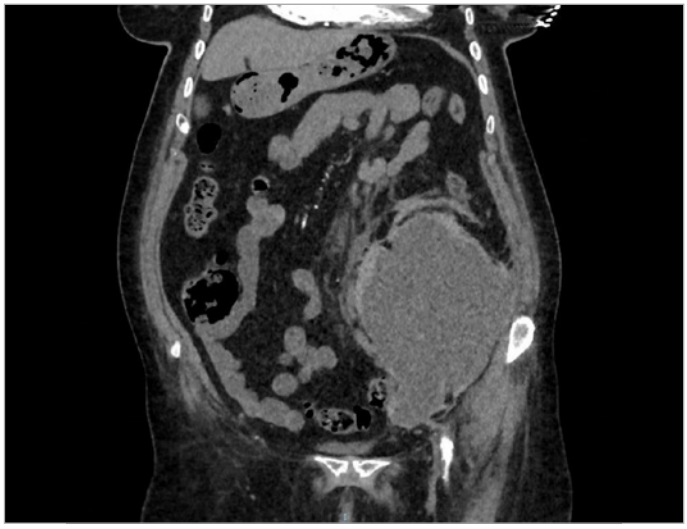

Figure 1. *Psoas hematoma.*

[Abstract:1941]

EVALUATION OF THE EFFECTS OF THE COURSE TITLED "HEALTHY LIVING" ON HEALTHY LIFESTYLE DEVELOPMENT BEHAVIORS IN MEDICAL STUDENTS

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Purpose: The purpose of this study is to evaluate the effect of the "Healthy Living" course on students' healthy lifestyle development behaviours. The aim of "Healthy Living" course is to raise their awareness about the importance of healthy lifestyle, to help improve their own life style and to ensure that they become the right role models for their patients and the society.

Methods: In this quasi-experimental study, the students were evaluated with pre-test, Healthy Lifestyle Behaviors Scale (HLBS) and Quality of Life Scale (SF-36) surveys that were administered at the beginning of the course. At the end of the program, in order to determine the effects of the course on the students and their awareness of the importance of physical activity, the changes in the students' healthy lifestyle behaviours and quality of life levels were analyzed by post-test and using the same surveys HLBS and SF-36.

Findings: A total of 60 students participated in the study (age range 18-31 mean 20.82 ±1.83 and F: 38/ M: 22). The mean points received from pre-test was 143.50 and the post-test was 160.14 (p=0.0001). The mean points received from HLBS before the course were 132.98 and after 150.95 (p=0.0001). The mean points received from SF-36 was pre and post course were 63.25 vs 69.78 (p=0.02)

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Conclusions: Healthy Living course had positive effects on students' lifestyle, and psychological well-being. We believe that this course is useful for medical students to develop healthy lifestyle behaviours.

Keywords: healthy living, lifestyle medicine, medical students, healthy behaviours, medical educations

[Abstract:1965]

CLINICAL-FUNCTIONAL AND NUTRITIONAL-METABOLIC ASPECTS OF VIBRATION DISEASE IN COMBINATION WITH ARTERIAL HYPERTENSION

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Introduction: Vibration disease is of fundamental importance in deteriorating the quality of life, requiring regular monitoring in occupational pathology centers.

Purpose: Study of diagnostic criteria in patients with a comorbid phenotype of vibration disease in combination with arterial hypertension under conditions of exposure to vibration in the occupational pathology clinic.

Materials and Methods: An intersystem correlation analysis of clinical-functional and nutritional-metabolic indicators was performed with the relationship determined using the logical regression method. 431 people were examined, of which: 104 patients diagnosed with stage I vibration disease, 101 patients with vibration disease in combination with arterial hypertension, 107 patients with stage I-II arterial hypertension who do not have contact with vibration and 119 people working in the same enterprise out of contact with vibration.

Results: The course of vibration disease in conditions of comorbidity affects the prognosis of an occupational disease. Vibration disease in comorbid conditions, in contrast to isolated vibration disease, is characterized by a more severe course with worse nutritional-metabolic status, clinical, functional and laboratory parameters. In patients with the phenotype of vibration disease in combination with arterial hypertension, the polymorphic variant T/T Ala 16 Val (rs4880) of the copper-zinc superoxide dismutase gene is detected in 30% of cases, which is 1.9 and 1.2 times higher than in the control and comparison groups respectively.

Conclusions: The course of vibration disease and predicted features depend on the presence of comorbidity, as well as the intensity and duration of exposure to the production factor of vibration.

Keywords: vibration disease, arterial hypertension, comorbidity, nutritional status, diagnostic parameters

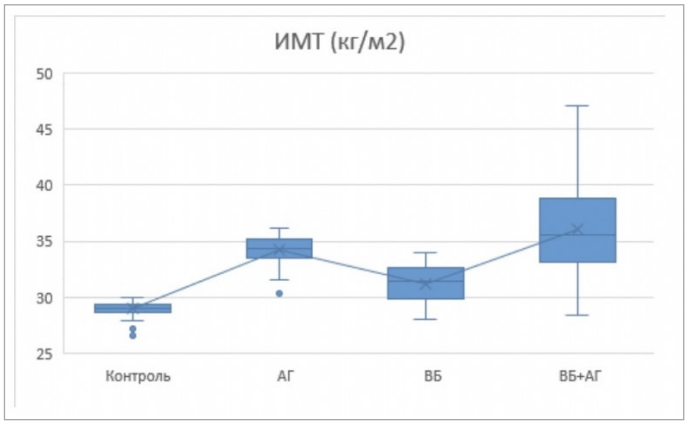

Figure 1. *Statistically significant differences between groups according to the nature of the breakdown with different BMI levels: in patients with the comorbid phenotype of vibration disease in combination with arterial hypertension, isolated vibration disease and isolated arterial hypertension, compared with the control group, there were statistically significantly fewer patients with excess body weight in due to the large number of patients with stage 1 obesity. In the group of isolated vibration disease and obesity 2 tbsp. in the group of isolated arterial hypertension and the comorbid phenotype of vibration disease in combination with arterial hypertension (p = 0.001).*

[Abstract:1994]

A RARE CASE OF FEBRILE NEUTROPENIA: A CASE REPORT

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Febrile neutropenia is a widely known adverse effect of certain drugs, despite its infrequency.

In this case report, we presented a 36-year-old Spanish female patient, recently diagnosed with autoimmune thyroiditis with positive anti-TPO and anti-TSH antibodies. Since then, she had started bisoprolol and thiamazole 30mg as a regular treatment to

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control the symptoms. No other significant past medical history except for hypertension and occasional treatment with analgesics for cephalgia.
On arrival, she presented odynophagia and left jaw pain in addition to fever and myalgia. Physical examination was anodyne. Laboratory tests indicated neutropenia (20 neutrophils/mcl), as a most relevant finding, which was confirmed by a peripheral blood smear. No other symptoms related to infection were noticed. Consequently, empiric antibiotic therapy was started in addition to granulocyte colony-stimulating factor (G-CSF).
During these findings, to rule out the existence of a hematological malignancy, an immunophenotype of peripheral blood was done. No immature cells were observed.
To complete the study, a thyroid ultrasound was also undertaken, which displayed suggestive data of thyroiditis. No other findings were noticed.
After excluding most frequent etiologies, it was considered a drug-induced cause. Thiamazole was stopped due to suspicion of febrile neutropenia secondary to adverse effects of this drug.
At discharge, the patient was afebrile and recovered levels of neutrophils. Radioactive iodine treatment was proposed as an alternative therapy instead of antithyroid drugs.

Keywords: *febrile neutropenia, adverse drug reaction, thiamazole*

[Abstract:2003]

FIRST-EPISODE PSYCHOSIS DUE TO HYPONATREMIA

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Case Description: A 30-year-old man with no known comorbidities presented with diarrhea, nausea and vomiting that started 13 days earlier. 6 days before, he was diagnosed with acute gastroenteritis at an external center. For the subsequent 1 week, he had complaints of lisping, convulsions, tremors, turning his legs like riding a bicycle and not being able to stop, inability to pay attention and focus. The patient described hallucinations. His relatives said that his state of consciousness was fluctuating and that he had been talking to himself for two days. He complained of agitation, said he saw God and tried to convey his thoughts. It was learned by his relatives that religious topics were frequently mentioned. Blood tests were within normal limits except for severe hyponatremia (117 mmol/l, range: 135-145 mmol/l) on admission. His cranial MRI scan did not show any acute neurologic pathology.
Diagnostic Pathways: The patient had no known history of substance abuse or use. The patient tested negative for alcohol, amphetamine, cocaine, cannabinoids, methadone, benzodiazepines, buprenorphine and other opiates. His cranial MRI scan did not show any acute neurologic pathology. Other examinations did not reveal any lung pathology or infection. Family history was positive for psychiatric disorders. Physical and neurological examination did not reveal any abnormal findings.
Discussion: Unlike other cases of hyponatremia, this case is worth presenting because of the predominance of psychic symptoms.

Keywords: *hyponatremia, psychosis, psychotic episode*

[Abstract:2015]

AN UNEXPECTED ACIDOSIS

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Background: A 45-year-old heart transplant recipient was admitted in our Unit for severe *Pseudomonas aeruginosa* pneumonia. Past medical history was significant for hypothyroidism, Gitelman's syndrome and pyeloureteral junction syndrome. After in-hospital antibiotic therapy and ureteral stent exchange, the patient was discharged with an off-label regimen of fosfomycin trometamol therapy to prevent recurrent urinary tract and stent infection.
Clinical Features: Five days after discharge, the patient was readmitted to our day-care service. Complete physical examination was negative except for a resting and intention tremor. Blood gas analysis showed a new onset, normal anion gap metabolic acidosis (pH 7.23). Kidney and liver function, as well as C-reactive protein, were normal, but hyperkalemia was present. Urinary pH was 7.25. High tacrolimus blood levels were found, and drug dose was tailored. After five days, tacrolimus returned normal, and tremor disappeared. In contrast, acidosis persisted unmodified at BGA.
Differential Diagnosis: Intestinal and urinary bicarbonate wasting, together with hypercapnia, ketoacidosis and poisoning, were all excluded. The presence of hyperkalemia led to a diagnosis of type 4 renal tubular acidosis (RTA). Aldosterone, cortisol and renin activity evaluations were not performed. Drugs play a central role in RTA etiology and, among these, tacrolimus features prominently. After drug history revision, drug-drug interaction between tacrolimus and fosfomycin was suspected.
Management: Fosfomycin tromethamol therapy was withdrawn and tacrolimus was kept in the normal range. After 2 weeks follow-up, acidosis and hyperkalemia resolved, and the patient went back to her routine follow-up after heart transplant.

Keywords: *acidosis, transplant, tacrolimus, fosfomycin*

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[Abstract:2017]

IMPACT OF SHARED CARE ON THE PROGNOSIS OF PATIENTS ADMITTED WITH HIP FRACTURE

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Objective: To analyze the impact of shared care between Internal Medicine and Traumatology in patients hospitalized with hip fracture in a second level hospital, in terms of mortality and readmissions.

Materials and Methods: A retrospective observational study comparing two samples of patients with hip fracture admitted to the Traumatology service from 15/01/2022 to 15/04/2022 and those admitted for the same period in 2023, following the recent implementation of shared care. Five variables were analyzed: mean length of stay, in-hospital mortality, mortality within the first month after discharge, mortality during the study period and number of readmissions in the following month.

Results: Sample size for the first period was 93 patients and 112 for the second. Calculated mean age was 85 years in both groups. In-hospital mortality was 8.6% and 4.5% for the first and second period. We also found a mortality rate in the following month of 7.1% and 1.9% respectively. Calculated mortality for the period studied was 15.1% for the first and 6.3% for the second. Readmission rate observed was 8.2% and 3.7% respectively. The mean length of stay was 8.65 versus 7.9 days. Statistically significant differences (p 0.038) were observed when comparing mortality rates during the study period.

Conclusions: Results show a statistically significant decrease in mortality after the implementation of shared care. Although we did not find statistical significance in the other comparisons made, we observed a clear trend towards a decrease. We think this is due to a greater stabilization of coexisting comorbidities by Internal Medicine.

Keywords: shared care, hip fracture, mortalilty

	2022	2023	
Mean length of stay	86.5 days	7.90 days	p 0.297
In-hospital mortality	8.6%	4.5%	p 0.226
Mortality in the month following discharge	7.1%	1.9%	p 0.074
Mortality during the study period	15.1%	6.9%	p 0.038
Readmission rate	8.2%	3.7%	p 0.183

Table 1. Results.

[Abstract:2043]

OPHTALMIC MANIFESTATIONS OF GIANT CELL ARTERITIS: A STUDY OF 50 CASES

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Internal Medicine Department, Habib Thameur Hospital, Tunis El Manar University, Tunis, Tunisia

Introduction: In Giant Cell Arteritis (GCA), ocular involvement is a prevalent yet intricate manifestation of the disease, capable of causing severe complications and visual impairment.

Purpose: The objective of our study was to describe the clinical, therapeutic, and evolutionary profiles associated with ophthalmic involvement in GCA.

Methods: This 10-year retrospective study in an internal medicine department included 50 cases diagnosed with GCA following the ACR/EULAR 2022 criteria.

Results: Among 50 cases of GCA, ocular involvement was observed in 32 patients (19 females and 13 males). The average age was 71 years (ranging from 53 to 91 years), with ocular manifestations as the initial presentation in 18 patients.

The main clinical presentation included reduced visual acuity in 30 patients, with additional symptoms like ocular pain and diplopia. Ophthalmological examination identified anterior ischemic optic neuropathy in 25 patients, retrobulbar optic neuropathy in 1 patient, and bilateral involvement in 4 cases.

Bilateral papillary edema was seen in 11 patients, and retinal ischemia was observed in one case. Other manifestations included general signs in 44% of patients and articular manifestations in 42% cases. A biological inflammatory syndrome was seen in 50% of patients. A temporal artery biopsy confirmed giant cell arteritis in 10 out of 28 cases. Treatment included corticosteroid therapy prescribed for all patients.

Conclusions: Ocular involvement persists as a prominent complication in the context of this vasculitis, with a considerable influence on the functional prognosis of the affected individuals.

Keywords: giant cell arteritis, ophtalmic manifestations, ocular, arteritis

[Abstract:2060]

PRILOCAINE-ASSOCIATED METHEMOGLOBULINEMIA: A CASE REPORT

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Hemoglobin is a molecule found in erythrocytes that allows oxygen to be transported to tissues, and in order for its function to continue, the iron in its structure must be in the form of iron. Ferrous iron in normal hemoglobulin can turn into ferric iron as a result of oxidation due to various oxidative stresses and as a

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result, methemoglobin (metHb) is formed. Since metHb cannot transport oxygen effectively, the Hb-oxygen dissociation curve begins to shift to the left and, in this case, tissue oxygenation as it decreases, central cyanosis may occur.
Under physiological conditions, metHb does not exceed 2% to 3% of total Hb. Acute states of 20% to 30% can be tolerated in individuals without anemia. However, a metHb level above 70% can be fatal. In the clinical setting, observation of blue-gray cyanosis that does not respond to oxygen therapy and dissociation between oxygen saturation and partial oxygen pressure are important in determining the diagnosis.
Methemoglobinemia may develop due to hereditary or acquired causes, but acquired methemoglobinemia is more common. Various drugs have been reported to be the cause of methemoglobinemia. These include nitrites, nitrates, quinines, phenacetin, chloroquine, dapsone, phenytoin, sulfonamides and local anesthetics. Prilocaine is frequently used as a local anesthetic and prilocaine-induced methemoglobinemia is relatively rare as it usually occurs with the administration of 40-50ml of the active ingredient. Here an adult case of methemoglobinemia, who developed after prilocaine was administered for local anesthesia before pericardiocentesis and was treated with oxygen support, erythrocyte suspension replacement and ascorbate administration is described.

Keywords: *methemoglobinemia, prilocaine, cyanosis*

[Abstract:2079]

DIFFERENTIAL DIAGNOSIS OF FOCAL CHANGES IN THE LUNGS. A CLINICAL CASE OF PULMONARY BENIGN METASTASIZING LEIOMYOMA

Elena Samorukova[1], *Polina Samozhenova*[1], *Ekaterina Goruleva*[2], *Elizaveta Fomina*[1], *Tatiana Adasheva*[1], *Andrey Malyavin*[3]

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Purpose: to describe the clinical case of diagnosis and treatment of a patient with pulmonary benign metastasizing leiomyoma (PBML) in order to help internists with effective diagnosis and management of this disease.
Methods: A 53-year-old patient was hospitalized in the clinic of Centrosoyuz (Moscow) for a planned hysterectomy as she had suffered from large uterine fibroids for 10 years. According to computed tomography (CT) of the chest organs, foci (metastases?) were found in the V, IX, and X segments of the left lung with a diameter of 5.2 mm, 5.2 mm, and 13 mm, respectively. The diagnosis of PBML was confirmed by biopsy of these foci on 15.02.2021.
Findings: The patient underwent extirpation of the uterus with appendages. Microscopic examination revealed that the intramural node in the myometrium was represented by multidirectional intertwining bundles of smooth muscle fibers without necrosis and mitosis, which was instrumental in the diagnosis of uterine leiomyoma.
The growth of metastases in the lungs was associated with the continued stimulation of the tumors by estrogens due to the late extirpation of the uterus.
Conclusions: Currently, there are no clinical guidelines for the diagnosis and treatment of PBML. PBML a rare disease found in women of reproductive age and characterized by multiple histologically benign distant metastases that are most commonly seen in the lungs but can also involve other organs and tissues. Differential diagnosis is essential for verifying the disease and determining the further patient management strategy for internists.

Keywords: *PBML, leiomyoma, metastases*

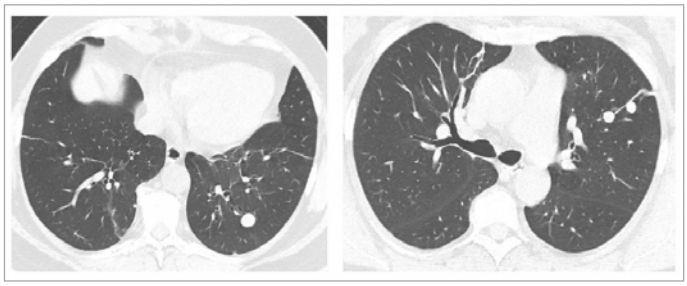

Figure 1. *Foci (metastases?) in the V, IX, X segments of the left lung with a diameter of 5.2 mm, 5.2 mm, 13 mm by computed tomography.*

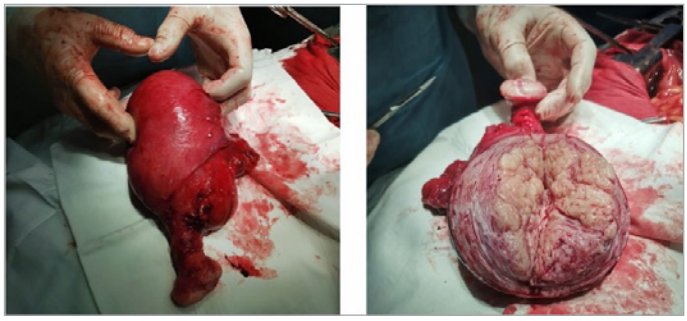

Figure 2. *Extirpation of the uterus with appendages.*

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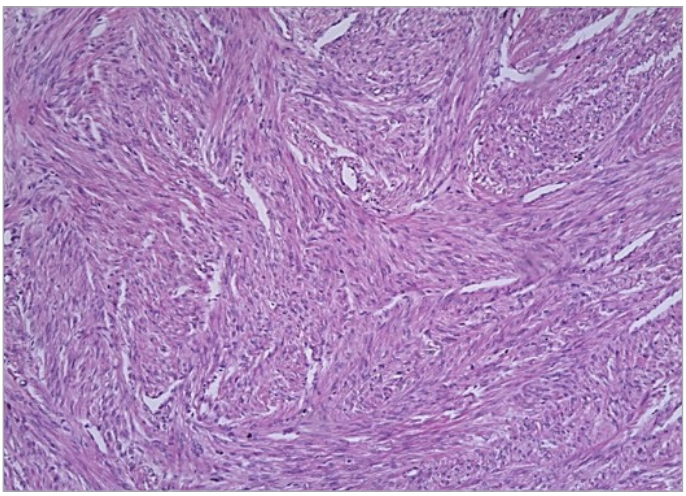

Figure 3. Microscopic examination revealed that the intramural node in the myometrium was represented by multidirectional intertwining bundles of smooth muscle fibers without necrosis and mitosis.

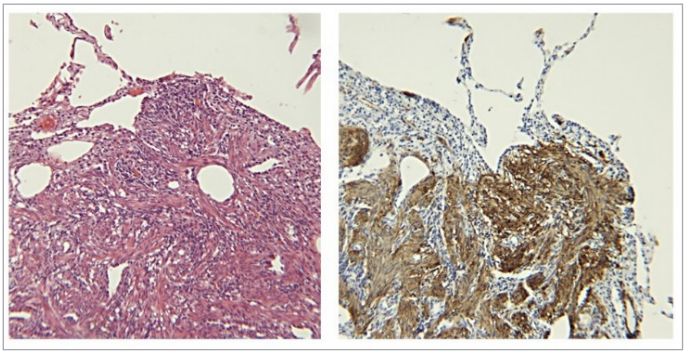

Figure 4. Immunohistochemistry of focal changes in the lungs.

[Abstract:2096]

BREAKING THE TREND: NOT JUST PRESCRIBING. DEPRESCRIBING CRITERIA FOR TWO PHARMACOLOGICAL GROUPS FREQUENTLY USED IN ELDERLY PATIENTS: STATINS AND BENZODIAZEPINES

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Background: Polymedication is a constant in our patients. STOPP/START and Less-Chron criteria can help us to withdraw drugs: statins in primary prevention in patients over 80 years or benzodiazepines for prolonged use, high risk of falls and absence of anxiety or insomnia. Our objective is to analyze the prevalence of benzodiazepine and statin use in patients over 80 years.

Methods: Descriptive, cross-sectional, analytical study of the first 43 patients over 80 years admitted to the C. A. Segovia in May 2023.

Results: 43 people (88 median age, 51% male), 45% from nursing homes. 45% had some degree of cognitive impairment. 47.5% had total Barthel dependence and 80% were at high risk of falls (Downton). 67.4% had polymedication (57.5% extreme).

28% consumed benzodiazepines for insomnia (13.9%), anxiety (13.9%), confusional sd. (27.9%) and in 44.3% the cause was not typified. 50% continued benzodiazepines in hospital and 21% were prescribed at discharge, meeting the criteria for deprescription 67% and in no case were withdrawn.

Regarding statins, 30.2% of the sample received them, 46.15% in primary prevention. Median age was 89 years, 30% had cognitive impairment and 69% were totally dependent. At the time of discharge, 35.5% received statins, 54.5% in primary prevention, fulfilling deprescription criteria, and in no case were statins withdrawn.

Conclusions: A pending objective is still to incorporate the deprescription of certain drugs, including benzodiazepines and statins. The STOPP/START and Less-Chron criteria can assist in the deprescribing of medication with no real benefit and true risks to our patients.

Keywords: *statins, benzodiazepines, extreme polymedication, deprescription*

[Abstract:2137]

A CASE OF ACUTE RIGHT ORBITAL SWELLING AND SKIN DEPIGMENTATION IN SARCOIDOSIS

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Introduction: Sarcoidosis is a systemic granulomatous disease. Vitiligo is an autoimmune depigmentation disorder. Both diseases are autoimmune-mediated, but currently not clearly linked. We report the case of a patient who newly presented with vitiligo and pulmonary sarcoidosis.

Case Presentation: A 27-year-old male with no history of previous chronic illness reported with complaints of cough and fatigue for the last 3 months, recent onset of hypopigmented areas on face and right orbital swelling.

On examination, patient had hypopigmented areas on face and neck. Ocular examination showed unilateral eyelid edema, and ptosis on right side. Ocular movements were normal. Rest of the systemic examinations were normal.

Laboratory tests were unremarkable except elevated CRP (18

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mg/L), ESR (32 mm/h) and WBC (13,800/µL). Chest X-ray and computed tomography (CT) demonstrated bilateral hilar and mediastinal lymph node enlargement.

Following CT findings, bronchoscopic BAL and transbronchial biopsy was performed. Histopathology results came as noncaseating granuloma. On further tests, CD4/CD8 ratio was 3.1 and ACE level was 84 micrograms/L. Patient was diagnosed with sarcoidosis.

The patient who had orbital swelling, ptosis and palpable lacrimal gland underwent cranial CT imaging and lacrimal gland biopsy. CT showed lacrimal gland enlargement and biopsy confirmed sarcoidosis involvement.

The patient was started on treatment with oral methyprednisolone 1 mg/kg/day. Lymph node enlargement, orbital swelling and ptosis improved significantly and fully regressed after 3 months.

Conclusions: We presented a sarcoidosis case with lacrimal manifestation and newly presenting vitiligo at the same time of sarcoidosis onset. This suggests an interplay between these seemingly unrelated diseases.

Keywords: *sarcoidosis, vitiligo, lacrimal gland, autoimmune, granulomatous, depigmentation*

Figure 1. *Depigmentation on face and neck.*

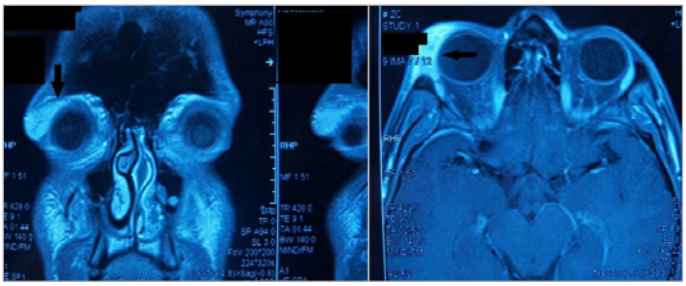

Figure 2. *Lacrimal gland enlargement on CT.*

[Abstract:2153]

A 55-YEAR-OLD MAN WITH FINGER INJURIES

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Case Description: A heavy smoker 55-year-old man was evaluated at medical consultation for ulcerative lesions on the fingers of both hands and feet for the past 4 years. He has no significant personal medical history and does not report clear Raynaud's phenomenon. He mentioned usual paraesthesia and hypoesthesia. He did not refer any other symptoms. The physical examination was anodyne except for poor distal perfusion, ulcerative lesions in various stages on both fingers and toes—some healed and others with areas of keratosis.

Clinical Hypothesis: Hand and feet ulcerated lesions in study.

Diagnostic Pathways: A complete blood test which included complete antibody profile and serology was performed without any alterations of interest. A capillaroscopy and an angio-CT were also performed without findings of interest. A thromboangiitis obliterans diagnosis was made and symptoms improved after tobacco abstention.

Discussion and Learning Points: Thromboangiitis obliterans is an occlusive, segmental, and recurrent vasculitis of unknown etiology that mainly affects young males with a heavy tobacco consumption history. Common symptoms include changes in the skin color of the hands and feet, potential occurrence of Raynaud's phenomenon, painful ulcerative lesions, paraesthesia, and intermittent claudication of limbs. Diagnosis is primarily clinical and exclusionary, ruling out other causes such as atherosclerosis, antiphospholipid syndrome, or vasculitis. The main treatment involves quitting smoking, with the option of using calcium antagonists and prostaglandin derivatives, as well as NSAIDs for pain control.

Keywords: *thromboangiitis obliterans, Leo Buerger syndrome, tobacco*

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[Abstract:2176]

A DIFFERENT APPROACH FOR EVALUATION OF PATIENTS WITH CHRONIC FATIGUE SYNDROME

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Purpose: A precise diagnostic test or biomarkers for diagnosis of chronic fatigue syndrome (CFS) have been not defined. However, a newer approach in the diagnosis and follow-up in the chronic fatigue syndrome is required. This study aimed to contribute to new approaches that can be used in the diagnosis of chronic fatigue syndrome.

Methods: CFS subjects (n=30) and control subjects (n=30) were included in this study. Groups were formed according to the results obtained from the Chronic Fatigue Questionnaire and Fatigue Severity Scale. Body composition analysis, grip strength, body temperature, respiratory rate, arterialized venous blood gases, were performed in all subjects. All subjects were evaluated with Healthy Lifestyle Behaviours Scale (HLBS), SF-36, Beck's Depression Inventory, Pittsburgh Sleep Quality Index, and McGill Pain Questionnaire.

Findings: There was no difference between control and CSF groups in terms of age, gender, body composition, body temperature, respiratory rate, and grip strength. The blood lactate levels in CFS and control groups were in consecutive order 1,337± 1,947 vs 1,810 ± 2,246 cLac mmol/L. This difference was statistically significant ($p<0.05$). There were statistically significant differences in survey results between groups ($p<0.05$; $p<0.0001$).

Conclusions: The arterialized venous blood gases, some surveys might be used as a diagnostic tools in patients with CSF. More studies are needed to develop new diagnostic tools and explore the underlying pathophysiology of CFS.

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Keywords: *chronic fatique syndrome, pathophysiology, arterialized venous blood gases, blood lactate, survey*

[Abstract:2187]

FROM SELF-HARM TO SEPTIC SHOCK: A CRITICAL ANALYSIS OF INTRAVENOUS SELF-INJECTION WITH PHARMACEUTICALS AND NON-MEDICINAL SUBSTANCES

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A 22-year-old male, with no significant medical history, was engaged in the perilous act of intravenous self-injection, comprising a mixture of crushed lansoprazole, an unidentified over-the-counter cold remedy, and red pepper powder dissolved in tap water. Approximately one hour post-injection, the patient experienced acute onset of systemic symptoms including chills, subjective fever, marked weakness, and fatigue, necessitating emergency medical attention.

Upon presentation to the emergency department, the patient was conscious yet exhibited critical signs of hypotension, tachypnea, and tachycardia, with a requirement for supplemental oxygen. Laboratory tests showed a group of results that were indicative of septic shock and metabolic acidosis, which included high levels of acute-phase proteins, lactic acid, and acute kidney failure. Therapeutic intervention was initiated promptly, featuring inotropic support with noradrenaline and piperacillin-tazobactam administration.

The patient's intensive care unit stay lasted for four days, during which they showed a remarkable improvement in their clinical condition. His acute-phase reactants showed significant regression, and he achieved hemodynamic stability, allowing for cessation of inotropic support and subsequent transfer to a general medical ward.

This case underscores the grave medical implications of self-injecting nonsterile substances, a practice that can precipitate severe septic shock and organ dysfunction. It also highlights the critical importance of rapid clinical assessment and initiation of appropriate therapeutic measures for managing such complex and high-risk clinical scenarios. The positive outcome in this case can be attributed to timely and targeted medical intervention, which demonstrates the efficacy of prompt and precise treatment strategies in cases of drug-induced septic shock.

Keywords: *septic shock, suicide, intensive care unit*

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[Abstract:2196]

PRESCRIBING PRUDENCE: AUDIT ON ANTIBIOTIC UTILIZATION IN A PRIVATE HOSPITAL

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Background and Aims: Antibiotic resistance is a growing concern. Overuse and misuse of antibiotics have been considered the main drivers of antibiotic resistance. This audit evaluated prescribing practices and adherence to antibiotic guidelines in a private Dublin hospital.

Methods: This was a single-center retrospective audit conducted, which included patients on antibiotics across three wards without specialty prejudice. Simple randomised sampling was used. Patient data was collected using a standardised tool from the hospital's digital system, Meditech, encompassing an electronic medication administration record from August to October 2023. Patient data was anonymized for analysis with descriptive and inferential statistics.

Results: Sixty patients were included. The parameters examined were antibiotic review and stop dates, documented indication, adherence to hospital guidelines, duration of intravenous (IV) antibiotics, and total duration of antibiotics. Only twenty patients were found to have review/stop dates. The indication was documented in 78% (n=47) of the patients. There was 58% adherence to hospital guidelines. Twenty-nine patients (48%) were on IV antibiotics for over 48 hours. Most of the patients were on antibiotics for seven days. The prevailing broad-spectrum antibiotics in use were Co-Amoxclav and Piperacillin/Tazobactam in 25% and 20% respectively. There was no statistically significant difference between adherence to the guidelines and patient distribution among the wards, or specialty with p-values of 0.647 and 0.905 respectively.

Conclusions: This audit provides valuable insights into antibiotic use in a private hospital. Adherence to antibiotic guidelines will contribute to an overall reduction in antibiotic resistance.

Keywords: *antibiotic prescribing patterns, duration of antibiotics treatment, adherence to antibiotics guidelines*

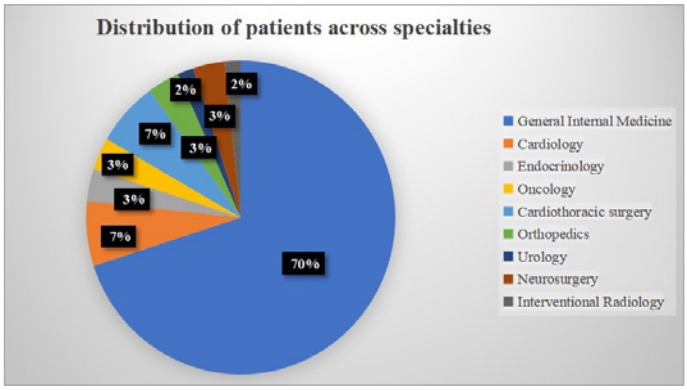

Figure 1. *Distribution of patients across specialties.*

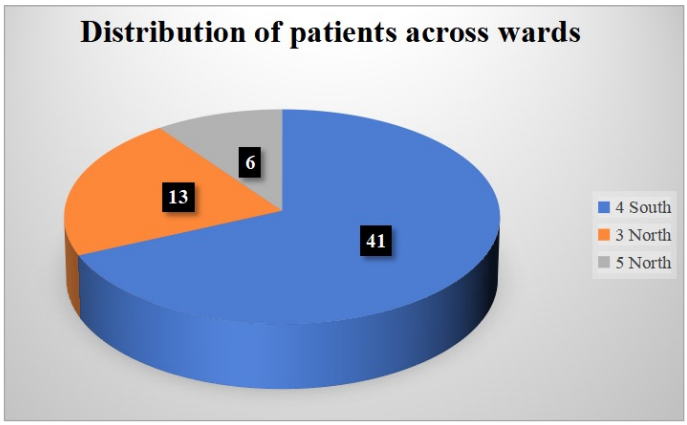

Figure 2. *Distribution of patients across wards.*

[Abstract:2228]

SOCIAL HOSPITALISATION AS AN UNSEEN RISK FACTOR FOR NEGATIVE OUTCOMES

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Summary: Clinical need is not the only reason that keeps patients hospitalised, sometimes social reasons imply longer stays. This increases the risk of nosocomial infections and delays the availability of beds for new patients to be admitted.

Purpose: We aim to characterise social hospitalisations and some of their negative outcomes.

Methods: A cross-sectional study was undertaken in a tertiary Portuguese hospital (2021-2023). Patients with prolonged hospitalisations due to social factors admitted to internal medicine ward were included. Data was extracted from medical charts, which included sociodemographic and clinical variables. We evaluated the average length of stay (ALOS) after clinical discharge, the prevalence and negative outcomes (e.g., nosocomial infection and mortality). Data analysis was performed using univariate statistics (IBM SPSS v.20.0).

Findings: A total of 190 patients were included (17.3% of all patients admitted), where 53.1% were female with a mean age of 78.4±9.1 years old. We found that ALOS was 15.7±14.6 days.

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A total of 5 (2.6%) patients had their stay prolonged for over 100 days. Without these ALOS was 11.2±8.5 days. Furthermore, 52 (27.3%) patients contracted nosocomial infections during their extended stay and a total of 31 (16.3%) passed away in the hospital.
Conclusions: On average, around one in six patients had their stay extended by over two weeks. About one third of these patients had a negative outcome, which highlights the importance of having an effective social service back up, aiming to mitigate these outcomes.

Keywords: *social hospitalisation, nosocomial infection, mortality*

[Abstract:2234]

REHABILITATION MEDICINE AS A TOOL THAT SHOULD NOT BE SET ASIDE

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Summary: Decrease in autonomy and prolonged hospitalisation is an issue in daily practice, requiring the support and collaboration of Physical Medicine and Rehabilitation (PM&R) to restore the functional ability and improve patients' quality of life.
Purpose: We aim to characterize the population where PM&R support was requested and evaluate the progress of patients' autonomy during this process.
Methods: A cross-sectional study was undertaken in a tertiary Portuguese hospital (2021-2023). Patients where PM&R was requested during their stay in the internal medicine ward were included. Data was extracted from medical charts and Katz Index of Independence in Activities of Daily Living (KI-ADL) was applied admission and discharge day. The main diagnosis and the reasons for PM&R request were recorded. Data analysis was performed using univariate statistics (IBM SPSS v.20.0).
Findings: A total of 136 patients were included (12.4% of all patients admitted), where 54.4% were female with a mean age of 72.7±8.5 years old. Over half of the sample (52.9%;n=72) was previously autonomous (KI-ADL: 6) and 17.6% (n=24) moderately dependent (KI-ADL: 3-4). PM&R support was mostly requested for patients with infectious (36.0%;n=49) and neurological (30.1%;n=41) diseases. Progressive loss of autonomy caused by inactivity during hospitalisation (43.4%;n=59) and acute loss of autonomy (35.3%;n=48) topped the list of requests. With this approach 67.6% (n=92) fully recovered from their lost autonomy and 4.4% (n=6) were discharged with higher autonomy.
Conclusions: In about 12% of patients PM&R was requested and over two thirds of them fully recovered from their lost autonomy.

Keywords: *physical medicine and rehabilitation, loss of autonomy, quality of life*

[Abstract:2235]

A DRAMATIC CASE OF RHADOMYOLISIS DEVELOPED AS A RESULT OF TOURIST TRAVEL

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Introduction: Effort-induced rhabdomyolysis is a condition with life-threatening consequences.
Case Presentation: 73-year-old Chinese male patient, without co-morbidities other than CAD and hyperlipidaemia walked 20 km the day before. There were weakness, decreased urine output for the last week. As arrest developed after syncope CPR was applied and the pulse was taken at the 26th minute. In the ICU, GCS:3, pupils dilated, pretibial edema bilaterally 3 positive. Blood gas (Table 1) revealed profound metabolic acidosis. The biochemistry tests performed are given in Table 2. The patient was found to have high CK levels along with severe hyperkalemia, hyperphosphatemia and decreased urine output. Rhabdomyolysis and its complications were considered in the preliminary diagnosis. Rapid intravenous fluid replacement and bicarbonate therapy were given. CRRT was started. The current condition of the patient, who had hemorrhagic discharge from the urinary catheter and nasogastric tube, was thought to be related to uremic coagulopathy. When arrest developed again on the night of hospitalization, appropriate resuscitation was started and the pulse was taken at the 5th minute. The patient, who continued CRRT on the 2nd day of hospitalization, was also receiving noradrenaline infusion at 2 mcg/kg/min. The patient's potassium level reached the normal range under CRRT. The patient had another cardiac arrest. There was no response to 45 minutes of appropriate CPR with adrenaline administered every 3 minutes and the patient was recorded as dead.
Discussion and Conclusions: People who do not exercise regularly have a risk of rhabdomyolysis. Even though electrolyte disturbance is tried to be eliminated by treatment, it causes irreversible circulatory and respiratory problems in the patient in the period from the appearance of symptoms to hospital admission.

Keywords: *rhabdomyolisis, CRRT, tourist*

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	ph	pCO2	Lac	Potassium	Bicarbonate
First arrival	6.77	36.1	5.3	7.3	4.5
	6.85	33.4	8.1	7.3	6
	6.83	25.6	7.2	6.6	5
	6.95	24.4	7.4	7	6.4
	6.93	25.3	7.3	7	6.2
	6.99	27.8	6.9	6.5	7.5
	7.01	22.3	6.3	6	7
	6.98	45.2	5.8	5.2	9.6
	7.09	52.9	4.9	4.7	14.2
	7.07	62.1	4.6	3.7	14.6
	7.07	64.7	4.8	3	15.4
	7.04	76.8	6.7	3.4	14.5
	7.11	60.2	6.1	3.6	15.5
	7.16	61.1	6	3.2	18.1

Table 1. Blood Gas Follow-up.

	Value
Glucose (mg/dL)	138
Creatinine (mg/dL)	17.62
Albumin (mg/dL)	3.8
Total Bilirubin (mg/dL)	0.33
Direct Bilirubin (mg/dL)	0.13
ALP (U/L)	124
LDH (U/L)	308
GGT (IU/L)	9
CRP (mg/L)	180.91
CK (U/L)	1171
Na (mmol/L)	130
K (mmol/L)	8.02
P (mg/dL)	12.35

Table 2. Laboratory Data.

[Abstract:2245]

BUPRENORPHINE WITHDRAWAL AFTER ABERRANT OPIOID BEHAVIOR

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Case Report: A 27-year-old woman with a history of lung transplantation for cystic fibrosis and refractory migraine in current treatment with galcanezumab was admitted for febrile syndrome of unknown origin. During the course of the admission, the demand for intravenous pethidine as an analgesic for holocranial headache, especially after dinner, was striking. In a previous admission, the symptoms were accentuated and after trying various adjuvants, she received 50 mg of pethidine as rescue medication, which gave her great relief. Since then, every time she had a headache, she requested this medication and even went to the emergency room to have it administered.

A careful clinical interview was conducted, analyzing the characteristics of the pain, which she described with prodromes and a maximum intensity of VAS 9, easing up to VAS 2 and facilitating sleep. The patient recognizes that she requested pethidine as soon as she perceived the prodromes, but also as a sleep inducer and for the sensation of well-being it provided her, so she was diagnosed with aberrant behavior to opioids. Dishabituation with transdermal buprenorphine and zolpidem as a sleep inducer was proposed. Treatment was started with buprenorphine 35 mcg, increasing after 72 hours to 52.5 mcg, achieving pain control for 6 weeks, with subsequent dose reduction until withdrawal.

Discussion: Opioid addiction is an emerging problem that is also seen in the hospital setting. Buprenorphine is an opioid with high affinity for the mu receptor suitable for opioid withdrawal.

Keywords: *opioid, addiction, buprenorphine*

[Abstract:2255]

AN EXPERIENCE OF TELEMEDICINE DURING THE COVID-19 PANDEMIC: FOLLOW-UP OF PATIENTS WITH OBESITY VIA PHONE INTERVIEWS

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Introduction: Telemedicine means providing healthcare services to remote patients using modern information technology like audio/video communications/computer. The aim of this study was to evaluate the data obtained through a telemedicine method implemented for follow-ups with patients in the obesity center during the COVID-19 pandemic.

Methods: All registered obesity center patients were included in the study and phone calls were conducted by the directing doctor. Patients were queried about their diet compliance-exercise levels-how they felt-present weight. Their questions were addressed, and recommendations for home activities during the pandemic, related to obesity and COVID-19 protection, were provided.

Results: 101 patients were called, 86 patients answered. 40.7 % had weight gain, 50% had weight loss and 9.3% patients had same weight. 27.9% of patients were following the recommended diet, 29% were noy and 33% were partially following their dietary recommendations.

The most common mistake was snacking during the day and at night. 30.2% of patients were doing home exercises regularly, 50% were not exercising at all and 19.8% were partially doing home exercises. The most common exercise was home-walking programmes. 53.5% of patients felt generally good, 24.4% generally bad and 22.1% partially good. The most common complaints were sleep disturbances and anxiety. All patients expressed satisfaction with being called for follow-up, stating that it motivated them.

Conclusions: Telemedicine proves to be an easy, safe, and effective follow-up method for chronic diseases such as obesity, especially during extraordinary times like the pandemic. Its application can be expanded once medical and legal regulations become clear,

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ensuring the safety of both patients and healthcare professionals using this method in all aspects.

Keywords: *telemedicine, obesity, COVID-19 pandemic*

[Abstract:2260]

STAY CLOSE TO THE SUN

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Case Report: We present the case of a 25-year-old woman who presented itchy lesions after taking a bath on the beach. At first, she thought it may have been due to contact with algae but she asked when it happened again after traveling to a country with low temperatures.

Methods: The ice cube test was performed, placing it for 5 minutes. Lesions began to appear after 2 minutes. Analyses were performed with blood count, biochemistry, proteinogram, ESR, IgE, cryoglobulins and serology for HIV, HBV, HCV, EBV, CMV, herpes, rubella as well as ANA, with normal values.

Findings: Treatment with cetirizine 10 mg/day was started on days where exposure to cold was expected but this was not effective. The dose was increased up to 4 times more and the antihistamine was changed, with no response. Finally, it was decided to start omalizumab, with an excellent response.

Conclusions: Cold urticaria can cause skin symptoms, angioedema or severe symptoms such as respiratory compromise. A clinical history is important to rule out secondary causes such as infections or autoimmune causes and a cold challenge test with an ice cube. Treatment consists of avoiding exposure to cold and the use of antihistamines. In refractory cases the use of monoclonal antibodies could be indicated. In case of serious impairment such as anaphylaxis the use of adrenaline would be necessary. Although serious reactions are rare, they can compromise the patient's life, so early diagnosis and treatment are vital as well as warning of situations that must be avoided.

Keywords: *urticaria, cold, ice cube*

Figure 1. *Ice cube test.*

Figure 2. *Urticaria after ice cube test.*

Figure 3. *Urticaria after taking a bath on the beach.*

[Abstract:2283]

LIVER AND LUNG INJURY IN A YOUNG WOMAN. IS IT WHAT IT SEEMS?

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Case Report: A 43-year-old woman, smoker, with a history of nummular palmoplantar eczema treated with methotrexate and endometriosis, for which she was taking oral contraceptives. Surgical interventions: bilateral breast prostheses.

She went to the emergency room with asthenia, weight loss, anorexia, irritability and cognitive alterations such as memory gaps and incoherent speech. In addition to intermittent fever.

Analysis shows new-onset macrocytic anemia and imaging findings of bilateral hilar lymphadenopathy, a ground-glass pattern in the upper lung fields, and liver injury.

Several liver biopsies were performed without a clear diagnosis, so our differential diagnosis included: Sarcoidosis (due to lymphadenopathy and fibrosis), lymphoma (in relation to liver lesions but also related to breast prostheses), methotrexate toxicity (lung involvement). and hepatic), and a differential diagnosis of liver lesions such as ACHO-related adenoma, focal

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nodular hyperplasia, fibrolamellar carcinoma or hepatocellular carcinoma was also performed.
But after performing a liver MRI that ruled out lymphoma and bronchoalveolar lavage that ruled out sarcoidosis, we were able to conclude that it was pulmonary toxicity due to methotrexate, which improved after the withdrawal of the drug, and a hepatic adenoma in relation to taking ACHO (with a histological diagnosis confirmation after performing a left lobe hepatectomy.

Keywords: *lung injury, lymphadenopathy, methotrexate, lymphoma, contraceptives, macrocytic anemia*

[Abstract:2327]

SURGICAL ABDOMEN IN HEMODIALYSIS PATIENT: A CASE REPORT OF LATE-ONSET ENCAPSULATED PERITONEAL SCLEROSIS

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Background: Encapsulated peritoneal sclerosis (EPS) is a rare complication of long-term peritoneal dialysis that has a high rate of morbidity and mortality.
Case Presentation: We present a 48-year-old male patient who was first diagnosed with hepatitis B and renal failure due undetermined nephropathy in 2017. He was followed up in the peritoneal dialysis unit for four years and he presented only one episode of bacterial peritonitis *(Pseudomonas)* resistant to antibiotics with ultrafiltration failure motivating the switch to hemodialysis. After three years, the patient reported symptoms of atypical abdominal pain, anorexia, vomiting and abdominal distension. A computed-tomography (CT) scan revealed encysted peritonitis and "loculated ascites" requiring surgical drainage. The clinical presentation was severe with repeated episodes of total bowel obstruction, weight loss and malnutrition that mandated his prolonged hospitalization and then raising the clinical suspicion of EPS. He was treated with tamoxifen and steroids which resulted in regression of signs and symptoms after a week. Repeated CT scan after three months of treatment showed a complete regression of calcifying lesions, peritoneal thickening and cysts. During follow-up, the patient remained symptoms-free in an excellent clinical condition, and he is actually maintained under the same bitherapy.
Conclusions: Factors such as long-term peritoneal dialysis and history of bacterial peritonitis may cause EPS as shown in our case. However, early response to corticosteroids and tamoxifen is rarely observed.

Keywords: *encapsulating peritoneal sclerosis, peritoneal dialysis, peritoneal fibrosis, Intestinal obstruction, tamoxifen*

[Abstract:2329]

A STRIKING LOWER BACK PAIN

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Background: We present the case of a 38-year-old man with no relevant medical background who went to emergencies three times due to lower back pain.
Case Report: The examination revealed lower limbs with edema up to the thighs. Blood tests were normal except for a D-dimer of 30124. Venous Doppler ultrasound of the bilateral lower limbs was performed and DVT of the entire venous territory of both legs was displayed. A pulmonary CT angiography was performed, which was normal. We requested an abdominal CT angiography and a probable agenesis of a short segment of the infrarenal inferior vena cava was found. We maintained the patient with enoxaparin at therapeutic doses and he also underwent pharmacomechanical fibrinolysis. In control phleboCT prior to discharge, partial repermeabilization of the venous drainage of both lower limbs was observed.
Discussion: Agenesis of the inferior vena cava is the least common congenital anomaly of the inferior vena cava. The most common thing is that it is asymptomatic but it can present with lower back pain as in our patient. It is usually associated with other anomalies such as situs inversus, although we did not find any in the imaging tests performed. According to some studies, 5% of young patients with DVT have IVC agenesis. Furthermore, 40% of patients with IVC malformations associated with DVT are related to hereditary thrombophilias.
Conclusions: It is important to take this entity into account in cases of DVT, look for other associated malformations and rule out thrombophilia.

Keywords: *agenesis, thrombosis, cava*

Figure 1. *Agenesis of infrarenal segment of IVC.*

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Figure 2. Postfibrinolysis phlebography.

Figure 3. Prefibrinolysis phlebography.

[Abstract:2435]

MORTALITY RATE AND RELATED FACTORS OF PATIENTS ADMITTED TO THE INTERNAL MEDICINE INTENSIVE CARE UNIT

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Introduction: Patients with high risk of morbidity and mortality are followed and treated in Intensive Care Units. In our country, studies examining factors related to mortality in internal medicine intensive care units are limited, and there are many factors that affect the mortality of patients in intensive care units. In this study, we aimed to examine the mortality rates and related factors of patients admitted to intensive care.

Materials and Methods: All patients over the age of 18 who were admitted to the Internal Medicine Intensive Care Unit between January 1, 2019 and October 31, 2023 were included in the study. The patients' ages, gender, reasons for hospitalization, comorbid diseases, length of stay and mortality were recorded.

Results: 902 patients were included in our study. The all-cause mortality rate in our intensive care unit was found to be 39%. The highest hospitalization rate was found in patients hospitalized due to urogenital system diseases (23.4%) and the highest mortality rate (55.8%) in patients hospitalized due to respiratory system diseases. Mortality was found to be higher in patients with high Apache II scores, long hospital stays and high number of comorbidities. Additionally, mortality was high in the group with low Plt value. In our study, the mortality rate was found to be low in patients with high hemoglobin and HDL values, while a high mortality rate was observed in patients with high procalcitonin, uric acid and ALT values. As a result, older age, having more comorbidities and high Apache score are associated with higher mortality.

Keywords: *intensive care unit, length of stay, disease*

Table 1. Intergroup Evaluation of Indications for Hospitalization in the Intensive Care Unit

Intensive Care Unit Indication	Non-Survivors (n=352)	Survivor (n=550)	Total (n=902)	p
Gastrointestinal System Disorders, n(%)	37 (26.8)	101 (73.2)	138 (15.3)	0.001
Respiratory System Disorders, n(%)	86 (55.8)	68 (44.2)	154 (17.1)	<0,001
Cardiovascular System Disorders, n(%)	19 (32.8)	39 (67.2)	58 (6.4)	0.312
Urogenital System Disorders, n(%)	112 (53.1)	99 (46.9)	211 (23.4)	<0,001
Cerebrovascular System Disorders, n(%)	15 (25.9)	43 (74.1)	58 (6.4)	0.034
Musculoskeletal Diseases, n(%)	2 (15.4)	11 (84.6)	13 (1.4)	0.078
Endocrine-Metabolic System Disorders, n(%)	9 (13)	60 (87)	69 (7.6)	<0,001
Hematopoietic System Diseases, n(%)	7 (31.8)	15 (68.2)	22 (2.4)	0.483
Infectious Disorders, n(%)	29 (54.7)	24 (45.3)	53 (5.9)	0.016
COVID, n(%)	27 (36)	48 (64)	75 (8.3)	0.575
Poisoning, n(%)	1 (3.8)	25 (96.2)	26 (2.9)	<0,001
Others, n(%)	8 (32)	17 (68)	25 (2.8)	0.465

Table 1. Intergroup Evaluation of Indications for Hospitalization in the Intensive Care Unit.

Table 2. Comparison of data between deceased and living intensive care patients

	Non-Survivors (n=352)		Survivor (n=550)		p
	Average ± SD	Medyan (min-max)	Average ± SD	Medyan (min-max)	
Gender (Female/Male)	178/174		278/272		0.995
Age	72.29 ± 11.49	72.5 (27 - 108)	64.66 ± 17.78	68 (18 - 97)	<0,001
Number of Comorbidities	2.26 ± 1.41	2 (0 – 8)	1.90 ± 1.42	2 (0 – 8)	<0,001
Intensive care days	17.04 ± 24.35	9 (1 - 208)	11.29 ± 13.75	7 (1 - 112)	0.533

Table 2. Comparison of data between deceased and living intensive care patients.

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Table 3. Comparison of the data between deceased and alive ICU patients					
	Dead (n=352)		Alive (n=550)		p
	Mean ± SD	Median (min-max)	Mean ± SD	Median (min-max)	
Gender (Female/Male)	178/174		278/272		0.995
Age	72.29 ± 11.49	72.5 (27 - 108)	64.66 ± 17.78	68 (18 - 97)	0.000
ICU days	17.04 ± 24.35	9 (1 - 208)	11.29 ± 13.75	7 (1 - 112)	0.533
Apache II Score	24.01 ± 7.22	22 (15 - 60)	12.68 ± 8.12	11 (0 - 33)	0.000
WBC	12.7 ± 8.64	11.39 (0.14 - 69.23)	12.29 ± 7.92	10.98 (0.39 - 113.41)	0.250*
Neutrophils	10.17 ± 7.11	9.2 (0.01 - 56.13)	9.63 ± 5.85	8.43 (0.01 - 44.04)	0.081*
Lymphocyte	1.34 ± 1.49	1 (0.03 - 13)	1.53 ± 1.1	1.26 (0.03 - 9.46)	0.000
Monocyte	1.07 ± 3.42	0.71 (0.01 - 56.76)	1 ± 4.11	0.7 (0.01 - 87.48)	0.852*
Eosinophils	0.09 ± 0.22	0.02 (0 - 2.21)	0.09 ± 0.14	0.04 (0 - 1.4)	0.001
Hemoglobin	10.35 ± 2.89	10.25 (3.8 - 18.5)	11.11 ± 3.08	11.4 (3.1 - 19.8)	0.000
MCV	85.52 ± 8.29	86.1 (54.7 - 108.3)	84.15 ± 8.95	84.2 (59.1 - 124.3)	0.010
Platelet	240.73 ± 155.2	221 (6 - 860)	260.96 ± 122.53	253 (5 - 790)	0.001
FBG	157.09 ± 110.48	127 (25 - 1032)	173.54 ± 109.71	141 (37 - 827)	0.000
BUN	48.93 ± 36.33	39.05 (6.2 - 223.1)	36.85 ± 30.48	28.3 (3 - 251.2)	0.000
Uric acid	7.78 ± 3.5	7.35 (1.6 - 20.1)	6.18 ± 3.06	5.6 (0.8 - 22.1)	0.000
Creatinine	2.25 ± 2.01	1.5 (0.24 - 12.74)	1.96 ± 2.16	1.11 (0.22 - 12.64)	0.000
AST	97.99 ± 331.77	29 (5 - 4109)	50.06 ± 115.06	23.5 (6 - 1609)	0.000
ALT	64.45 ± 230.66	21 (5 - 2800)	39.13 ± 98.99	18 (3 - 1555)	0.038
Na	136.15 ± 8.76	136 (101 - 177)	136.41 ± 7.96	137 (103 - 176)	0.664*
K	4.54 ± 1.05	4.5 (2 - 8.6)	4.43 ± 0.94	4.3 (2.2 - 9.5)	0.151*
Ca	8.64 ± 1.56	8.5 (3.9 - 18)	8.71 ± 1.04	8.7 (4.2 - 16.7)	0.000
Mg	2 ± 0.45	2 (0.63 - 3.9)	1.97 ± 0.41	1.94 (0.64 - 4.4)	0.042*
INR	1.29 ± 0.68	1.14 (0.87 - 7.73)	1.28 ± 1.17	1.08 (0.84 - 17.7)	0.000
aPTT	35.22 ± 15.03	32.2 (18.4 - 180)	32.27 ± 12.03	29.8 (14.8 - 130)	0.000
Total Protein	57.95 ± 10.31	57.8 (34.6 - 127.5)	61.89 ± 8.89	62.3 (33.7 - 84.6)	0.000
Albumin	29.09 ± 6.69	29.15 (9 - 48.4)	33.89 ± 6.8	33.9 (14.8 - 51)	0.000
Total Cholesterol	134.3 ± 45.61	128 (18 - 308)	149.26 ± 56.5	140 (42 - 583)	0.000
LDL	72.77 ± 40.25	66.7 (22.8 - 235.4)	86.98 ± 47.97	79.2 (5 - 469.6)	0.000
HDL	29.25 ± 17.91	28 (0 - 93)	33.09 ± 17.19	33 (0 - 94)	0.000
Triglyceride	161.43 ± 121.45	135 (0 - 1164)	145.96 ± 96.73	124 (0 - 989)	0.308*
CRP	110.42 ± 90.26	92.65 (0.8 - 376.7)	68.48 ± 88.34	26.9 (0.6 - 533.9)	0.000
Procalcitonin	4.56 ± 11.59	0.78 (0.04 - 100)	2.51 ± 10.67	0.23 (0.02 - 100)	0.000

ICU: intensive care unit, PNI: Prognostic nutritional index, HALP: Hemoglobin-Albumin-Lymphocyte-platelet score, CONUT: Controlling nutritional status, WBC: white blood cell, MCV: mean corpuscular volume, FBG: Fasting blood glucose, BUN: Blood Urea Nitrogen, AST: Aspartate aminotransferase, ALT: Alanine aminotransferase, Na: Sodium, K: Potassium, Ca: Calcium, Mg: magnesium, INR: International normalization range, aPTT: activated partial thromboplastin time, LDL: low-density lipoprotein, HDL: high-density lipoprotein, CRP: C-reactive protein
*: Normally distributed variables evaluated with Student T-test, other variables compared with Mann-Whitney-U test

Table 3. *Comparison of the data between deceased and alive ICU patients.*

[Abstract:2438]

ACUTE CHOLESTEROL DECREASE IN PATIENTS WITH HIP FRACTURE

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Objectives: In our everyday practice, we have noticed a reduction on cholesterol total values in patients admitted with hip fracture. Therefore, our goal is to analyze the evolution of cholesterol values in patients with hip fracture.

Materials and Methods: Descriptive and retrospective study. Out of 418 patients with hip fracture in 2022, 160 were selected having at least one determination of cholesterol in these periods: "previous": determinations before the admittance; "hospitalization": between day 1 and 3; and "post-discharge". Comparisons were performed using ANOVA method, and assuming confidence of 95%.

Results: We documented 160 patientes:113 were women (70,6%), with a mean age 83.3 years (IC 95% 81.7-84.9) and 47 were men (29.4 %), mean age 82.3 (IC 95% 80.5-84.3). Mean cholesterol values are showed in Table 1 and Figure 1. Globally, we observed decrease of 21.6% in cholesterol during hospitalization, compared to prior controls. Significant differences (ANOVA method), between cholesterol in "previous" and "hospitalization" and between "hospitalization" and "post-discharge", but not between "previous" and "post-discharge".

As shown in table 1, we analysed differences in cholesterol decrease depending on chronic treatment with statins; in 88 with decline of cholesterol at admittance (92.6%). Non statistically significant differences between the group were reported with or without statins. (Fisher's-exact p-value: 0.7710, Chi-squared p-value 0.8975) neither adjusted by categories (Fisher's-exact p-value: 0.6134, Chi-squared p-value 0.8201.

Conclusions: In patients with hip fracture, we observed an acute descent of 21.6% of total cholesterol, with posterior recovery. This decrease could reflect the catabolic impact of the hip fracture in the organism.

Keywords: *cholesterol, hip fracture, statins*

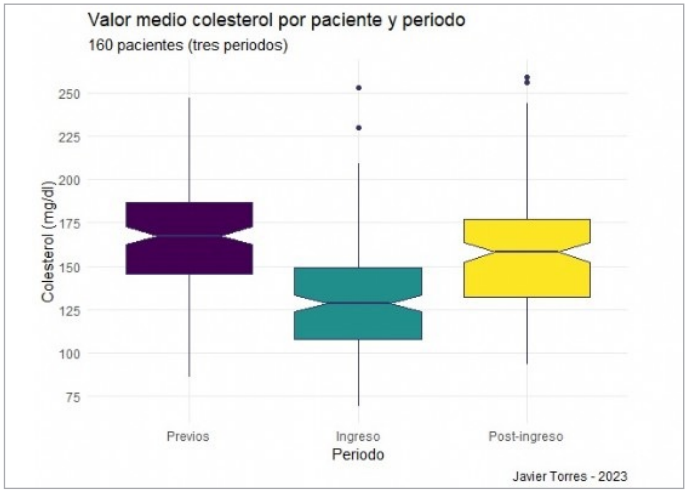

Figure 1.

	N	Previous	Hospitalization	Post-discharge
Total	160	167.6 (162.6–172.7)	131.4 (126.6–136.3)	160.1 (155.0-166.1)
No statin treatment	95 (60%)	172.5 (166.2-179.1)	133.6 (127.8-140.0)	163.9 (156.6-171.3)
All statins	65 (40%)	160.4 (152.6-167.7)	128.3 (121.0-137.2)	154.5 (146.0-163.5)
Statins low power	22	169.0 (156.8-181.1)	138.1 (127.4-148.2)	163.6 (148.1-181.0)
Statins moderate power	26	166.2 (154.3-180.0)	131.5 (117.8-147.9)	154.0 (140.7-165.3)
Statins high power	17	140.4 (128.2-152.6)	110.8 (102.4-119.2)	143.4 (129.2-158.9)

Table 1. *Mean colesterol value for each period (mg/dL, IC 95%).*

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[Abstract:2464]

STATINS. TO INFINITY AND BEYOND? PREVALENCE OF STATIN CONSUMPTION IN PATIENTS OVER 80 YEARS OF AGE AND THE INDICATION FOR DEPRESCRIPTION

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Our objective is to study the prevalence of statin prescription in primary prevention in the elderly, multi-pathological and poly-medicated population, and verify compliance with the deprescription criteria in our environment.

Descriptive, cross-sectional study in the first 43 patients admitted to a second level hospital (May 2023). The prescription of statins and their indication in patients over 80 years of age were analyzed. The SPSSv27 statistical program was used, with the approval of the institutional research committee.

43 patients, with a median age of 88 years were analysed, 51% were men. 32.5% had a history of major cardiovascular event (the most common being STROKE, in 71.4% of them). In-hospital mortality was as high as 27.9%. The most frequent diagnosis was infection (63.6%) and heart failure (18.2%). Patients who consumed statins (30.2% of the total sample) had a median age of 89 years, 30% had cognitive impairment and 69% had severe or total dependence. 92.3% of statin users had multiple pathologies and 69% had complex chronic conditions. 76% had polypharmacy, with 53.8% being extreme. 46.15% (6) were taking statins for primary prevention.

At hospital discharge, 35.5% were prescribed statins, with 54.54% (6) for primary prevention, thus fulfilling the LESS-CHRON deprescription recommendation. In none of these patients was it withdrawn at discharge or during Primary Care follow-up.

The LESS-CHRON criteria can help deprescribe medication without real benefits to our patients, in the case of statins, in primary prevention in people over 80 years of age, a task on which we must continue working.

Keywords: *statins, deprescription, elderly, polypharmacy*

[Abstract:2474]

CHRONIC CAVITARY PULMONARY ASPERGILLOSIS

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Introduction: Aspergillus, a mold species, can induce various clinical conditions, ranging from allergic diseases to invasive illnesses, depending on the patient's immune status and structural lung diseases. Chronic Pulmonary Aspergillosis (CPA) is an infection characterized by locally invasive manifestations, especially reported in patients with chronic lung diseases.

Case Report: A 47-year-old male with a known history of COPD presented to the emergency department with chills, tremors, and back pain persisting for four days. Further investigation and treatment were initiated after detecting a 4 cm cavitary lesion in the right upper lobe and patchy ground-glass opacities in the right lower lobe on chest CT. The patient, appearing cachectic, exhibited fine crackles bilaterally in the lower lung zones during the physical examination. Laboratory tests revealed abnormalities in hemoglobin, white blood cell count, and renal function.

Despite a negative COVID-19 PCR result, empirical antibiotic therapy was initiated. Diagnostic tests, including non-specific sputum culture, acid-fast bacilli, tuberculosis PCR, and serum galactomannan, yielded negative results. No pathology was observed in ANCA, ANA, ENA profiles, and hydatid cyst markers. A diagnostic bronchoscopy revealed mold morphology in the fungal culture, and galactomannan antigen testing was positive.

In subsequent follow-ups, the patient, without active complaints and normal values, started voriconazole therapy.

Discussion: CPA affects immunocompetent individuals or those with mild immunosuppression and underlying lung diseases. Treatment aims to prevent life-threatening hemoptysis and improve symptoms and the patient's quality of life. Oral azoles are the first-line standard treatment, with short-term intravenous amphotericin B and echinocandins used in selected cases.

Keywords: *Aspergillosis, Voriconazole, COPD*

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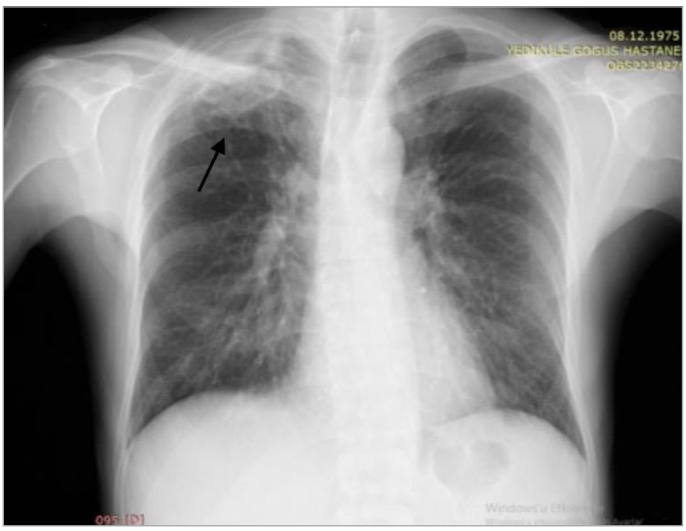

Figure 1. Chest X-ray image of cavitary aspergillosis.

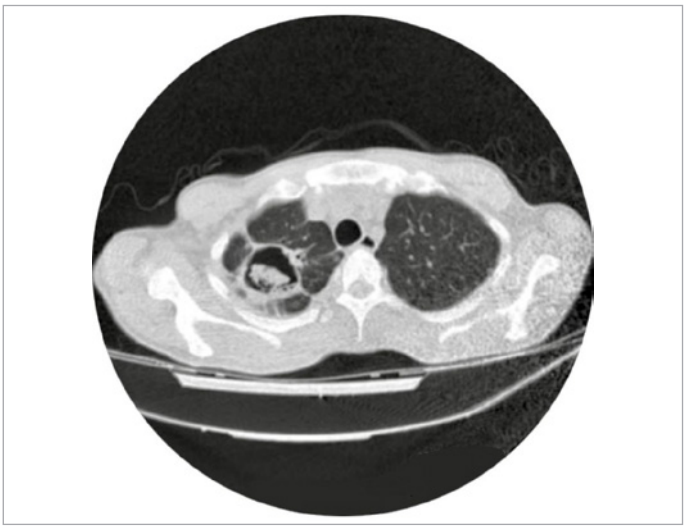

Figure 2. Computed tomography image of cavitary aspergillosis observed in the right upper lobe of the lung.

[Abstract:2490]

NEVER TOO LATE FOR A DIAGNOSIS

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Case Description: A 58-year-old man was submitted by his GP for recurrent otitis and respiratory infections. He also referred to occasional dyspnea. Only a low weight and an enlarged espiration stood out of physical examination.

Clinical Hypothesis: COPD, recurrent infections, immunodeficiency.

Diagnostic Pathways: In the blood test we noticed a global deficit of all immunoglobulins, including IgA, IgG and IgM which were confirmed in a second test. An x-ray and a thoracic CT were asked which showed compatible results with COPD and bronchiectasis. There were no other significant results in other tests, including head MRI, ear MRI, serology. He was not taking any immunosuppressive drugs. Finally, we asked for an immunological study that confirmed the diagnosis of common variable immunodeficiency.

Discussion and Learning Points: Common variable immunodeficiency is the most frequent symptomatic antibody deficiency, characterized by hypogammglobulinemia and recurrent bacterial infections. Some gene mutations, microbiome disbyosis and epigenetic changes have been described as ethiopatogenical factors of this disease. It is very important to maintain a high level of suspicion, because this disease is often related to diagnostic delays. The initial evaluation includes a complete blood test with lymphocyte subset analysis, and measurement of serum immunoglobulin. Furthermore, an IgG subclass analysis and genetic testing should be made. There are several classifications of this disease, such as the Paris Classification, given the numerous clinical features. Immunoglobulin replacement is the most important treatment as well as correct vaccinations and prophylactic and therapeutic antibiotics.

Keywords: common variable immunodeficiency, otitis, hypogammglobulinemia

[Abstract:2502]

"TRANSLATION, CROSS-CULTURAL ADAPTATION, AND VALIDATION OF THE BRISTOL SCALE STOOL FORM INTO THE PORTUGUESE LANGUAGE"

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Introduction: Stool characterization represents an important part of medical semiology.

Objective: To translate, adapt (cross-culturally) and validate The Bristol Stool Form Scale for the Portuguese population (BSFS-PT). The scale contains seven images and seven descriptions of stool forms, ranging from severe constipation to watery diarrhoea.

Methods: The original English version was adapted to the Portuguese language and culture. There were two initial translations; synthesis of the translations; back translation; expert committee; pre-test; submission of documentation to the developers for appraisal of the adaptation process.

Subjects were invited to match a randomly selected text defining one of the seven stool types in the scale with one of seven images described originally. A random selection of sample was offered for re-test reliability. The accuracy of responses, internal consistency, inter-observer reliability and reproducibility of the scale were evaluated.

Results: The sample included 50 nurses and 50 physicians. The expert committee ensured the validity of the content. The overall accuracy was 94.1%. Type 7 got the highest accuracy; type 6, the smallest. Nurses had more accuracy (mean value) than physicians (6.84 versus 6.34; p=0.049). There was internal consistency (Cronbach's alpha coefficient=0.64) and inter-observer reliability (Cohen's kappa coefficient, CKC=0.81; 95% confidence intervals,

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95%CI=0.74- 0.93). Reproducibility was confirmed (test-retest, 15 days apart, CKC=0.78, 95%CI=0.69-0.89).

Conclusions: BSFS-PT is valid, reliable, and reproducible in hospital settings, in the Portuguese cultural context. BSFS-PT is very useful in clinical practice to identify stool forms, being easy to understand and use.

Keywords: *validation study, reproducibility of results, feces, translating, translations*

[Abstract:2622]

TOXICITY OF METHOTREXATE AS A CAUSE OF STEVENS JOHNSON SYNDROME

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Purpose: Stevens-Johnson syndrome is a reactive dermatosis presented as erythema multiforme with vesicles and/or blisters with mucosal predominance. It is a rare process with a 20% of morbimortality in its most severe presentation: Toxic Epidermal Necrolysis. It is a major diagnostic challenge due to the large number of differential diagnoses it presents us with.

Methods: We present the case of a 78-year-old woman, with a history of rheumatoid arthritis with long evolution in treatment with Methotrexate, who is admitted for multisystemic clinical picture and plateletopenia. On examination, aphthous ulcers were observed on the jugal mucosa, in addition to disseminated maculopapular, pruritic and painful skin lesions with a necrotic center, respecting palms and soles.

Findings: Lesions' biopsy confirmed the diagnosis: erythema multiforme (Stevens-Johnson sd.).

Conclusions: Reviewing in different databases the adverse effects of methotrexate, the main clinical judgment is reached: multisystemic manifestation of methotrexate toxicity.

Keywords: *reactive dermatosis, blister, methotrexate*

[Abstract:2633]

MARKERS OF MONOCYTE ACTIVATION AND INFLAMMATION AND MORTALITY IN PATIENTS WITH SEVERE ALCOHOL USE DISORDER

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Background: Patients with severe Alcohol Use Disorder (AUD) have a high mid-term mortality. Potential predictors of death are needed.

Objectives: Analyze the association between markers of monocyte activation (sCD163, sCD14) and of inflammation (Interlequin 6 [IL-6], IL-10) and mortality in a cohort of patients with severe AUD admitted for hospital treatment of the disorder.

Methods: Longitudinal study in a cohort of patients admitted for treatment of severe AUD at Hospital-Universitari-Germans-Trias-i-Pujol and Hospital-de-Bellvitge between June 2013 and October 2022. To detect the association between markers of monocyte activation and inflammation in the highest quartile and mortality we performed Cox regression analyses adjusted by age and sex.

Results: We included 463patients (23% women); median age 49.5 years (interquartil range [IQR]: 43-56). Median alcohol intake before admission was 150 grams/day (IQR: 100-225); median duration of AUD was 20 years (IQR: 10-28). Median levels of sCD163, sCD14, IL-6 and IL-10 were 732 ng/mL (IQR: 460-1000), $1.73x10^6$ (IQR: 1.36-2.24), 3.28 pg/mL (IQR: 1.07-7.76) and 0.56 pg/mL (RIC: 0.02-2.01), respectively.

As of April 2023, 60 patients (13% of the total cohort) had died. The median follow-up was 3.8 years (RIC: 2-89-4.96), mortality rate was 3.1 per 100 patient-years. Patients with levels of sCD163, sCD14 and IL-6 in the highest quartile had greater risk of death [hazard ratios of 2.92 (95% Confidence Interval [CI]: 1.96-5.04), 1.96 (95% CI: 1.14-3.36) and 2.33 (95% CI: 1.37-3.97), respectively].

Conclusions: In this cohort of patients with severe AUD mortality was high and levels of sCD163, sCD14 and IL-6in the highest quartile had a higher risk of death.

Keywords: *inflammation, alcohol use disorder, interleukin*

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Risk factor	Hazard ratio (confidence interval 95%)	p-value
Sex	0.55 (0.26-1.20)	0.13
Age	1.02 (0.99-1.05)	0.06
sCD163	2.92 (1.69-5.04)	<0.01
sCD14	1.96 (1.14-3.36)	0.01
IL-6	2.33 (1.37-3.97)	<0.01
IL-10	0.75 (0.99-1.05)	0.13

Table 1. *Association between mortality and inflammation and monocyte activation markers.*
Cox regression expressing the hazard ratio (mortality) of patients admitted for detoxification and inflammation and monocyte activation markers.

[Abstract:2635]

HOW AVS HELPS TO CONFIRM THE DIAGNOSIS OF HYPERALDOSTERONISM?

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Primary hyperaldosteronism represents a current and underdiagnosed cause of secondary hypertension.
This case of a 45-year-old male who presented to the clinic with complaints of high blood pressure, rhythm disturbances, palpitations, dyspnea and muscle cramps. He was being managed in an outpatient department for hypokalemia and hypertension since the age of 38. He has been taking three antihypertensive and supplemental potassium. On physical examination, heart rate was 110 bpm while the blood pressure was 170/110 mmHg.
Initial investigations revealed increased creatinine, GFR-47 sodium 130 mmol/L and potassium 2.5 mmol/L.The patient was consulted by nephrologist, who suspected the problem with adrenal gland and sent the patient to endocrinologist. The Aldosterone-Renin ratio was calculated to be 510. The abdominal contrast-enhanced Computed Tomography scan showed nodular lesions in the adrenal glands;
A selective Adrenal Venous Sampling were performed. While the aldosterone and cortisol levels in the left adrenal vein were 97 ng/dL and >120 µg/dl, the levels in the right adrenal vein were 4086 ng/dL and >120 µg/dl, suggesting a diagnosis for Unilateral Adrenal Hyperplasia.
A right adrenalectomy was indeed done to the patient and medications such as spironolactone and oral potassium chloride were given orally during his hospital stay. His electrolytes and blood pressure were corrected 5th day after the surgery and he was subsequently discharged with verapamil, hydralazine, doxazosin and spironolactone. The aldosterone-renin ratio levels came 125 ng/dL (mL/hour)

Keywords: *adrenal gland, hypertension, AVS*

[Abstract:2655]

CELIAC ARTERY THROMBOSIS AND DISSECTION

Bilal Saygin, Yunus Can Ozalp, Iffet Nesli Kirmizidemir, Aysenur Akkoyun, Onur Sahin, Sahende Mehves Zengin Kavurmaci, Esma Nur Eren, Mine aysan, Hasan Basri Ergun, Hikmet Zeynep Agaoglu, Ayyuce Karaca, Zeliha Arslan Taskin, Baris Surul, Ali Mert, Esra Demir

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Celiac artery dissection is a rare condition that is being detected more often with the use of advanced imaging techniques.
A 43-year-old male presented with abdominal pain that reflected on his back. He was diagnosed with hypertension and hypothyroidism and is now taking ramipril, hydrochlorothiazide, and levothyroxine sodium to manage them. Regarding his examination, he has slightly epigastric tenderness without defence or rebound. His only laboratory abnormality tests found amylase at 85.5 U/L (13-53) and lipase at 92 U/L (13-60). No pancreatic pathology was detected in the abdominal ultrasound, but the tail part of the pancreas could not be evaluated due to gas. Abdominal tomography revealed celiac artery dissection and thrombosis. Coagulation parameters and rheumatologic vasculitis investigation revealed normal. PET CT showed that moderately increased ^{18}F-FDG retention was observed in the celiac artery orifice.
The patient was admitted to inpatient clinic, and parenteral nutrition was started. Anticoagulant and antiaggregant treatments started. During the follow-up period, the patient relieved his symptoms and discharged with oral anticoagulant and antiaggregant treatment for the follow-up period. One month later, control CT angiography showed that critical stenosis due to median arcuate ligament compression was detected in the celiac trunk orifice, and the new thrombosis occurred in the splenic arter. Previous celiac thrombosis resolved by 80 percent. The patient still didn't have any symptoms.
If the patient's general condition is stable, careful, conservative treatment can be used to manage CA dissection.

Keywords: *celiac artery, dissection, thrombosis*

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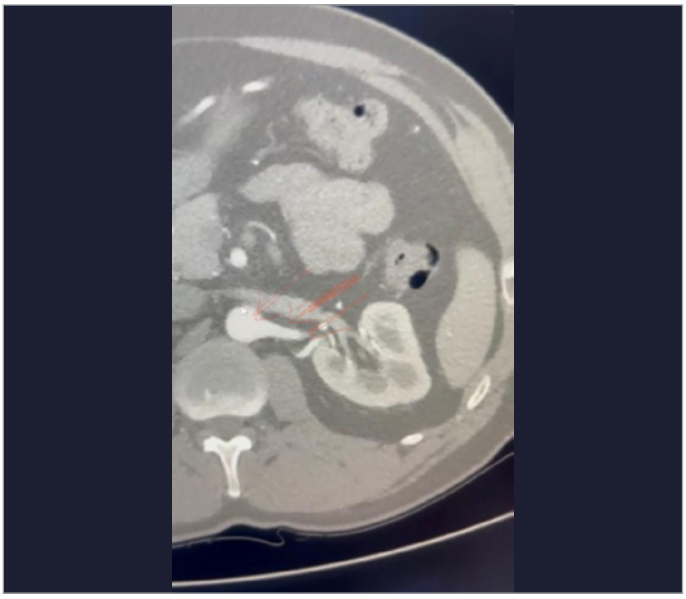

Figure 1. Arcuate ligament compression and its associated celiac thrombosis and dissection.

[Abstract:2689]

UPDATE AETIOPATHOGENESIS AND TREATMENT OF PSORIASIS: A LITERATURE REVIEW

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Background: Psoriasis is a very common skin condition that is caused by an immune system problem. T-cells, dendritic cells, macrophages and neutrophils all play a role in the proliferation of keratinocytes. Several genetic and environmental factors are involved in the development of this condition.

Objectives: The purpose of this study is to review aetiopathogenic causes and therapeutic aspects of psoriasis.

Methods: A narrative literature review provides an overview of the extensive literature on the etiology, pathogenesis and treatment of psoriasis. The data comes from well reads articles published over the last 30 years (1992-2022). Electronic databases were taken from Google Scholar, PubMed, Medscape and the University of South Wales.

Results: Two hundred two articles, which varied between literature reviews, systematic reviews, review articles, randomized controlled studies, meta-analyses and comparative studies. 100 out of 202 of the articles in this thesis focused on discussing the etiology, pathogenesis, pathophysiology and psoriasis treatments.

Conclusions: Psoriasis is a multifactorial chronic disease. Genetics, immune and environmental factors play a significant role in its development. Psoriasis is a treatable but incurable disease that is widespread and has a significant impact on quality of life. Advances in understanding the etiology and pathogenesis of psoriasis will undoubtedly lead to the discovery of new treatments and better patient outcomes and improve quality of life for patients.

Keywords: *psoriasis, etiology, pathogenesis, pathophysiology, treatment*

[Abstract:2699]

TRANSFUSION-ASSOCIATED ACUTE LUNG INJURY, A RARE BUT MORTAL CONDITION

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Transfusion-related acute lung injury (TRALI) is a rare complication of blood transfusion characterized by rapidly progressing lung injury with immunological mediation, which may occur after the transfusion of blood products and is associated with non-cardiogenic pulmonary edema. This is a potentially fatal condition if not diagnosed and treated early. Here, we presented a case of acute lung injury diagnosed following a blood transfusion during the management of gastrointestinal bleeding, along with a review of the literature.

Keywords: *blood transfusion, acute lung injury, TRALI*

Figure 1 : 8 hours after transfusion.
Increased bilateral infiltrations on chest X-ray.

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Figure 2. 1 month before transfusion.

	BUN (mg/dL)	Cre (mg/dL)	Hemoglobin (g/dL)	platelet (10 3 u/L)	INR	I.bil (mg/dL)	T.bil (mg/dL)	CRP (mg/dL)
Before Tr.	122	1.3	4.5	71	7.7	0.3	0.5	65
After Tr.	66	0.9	7.2	19	4.5	0.3	0.6	92
3.day	50	0.7	9	16	2.2	-	-	112
5.day	67	0.6	9.9	202	1.39	-	-	124

Table 1. Biochemical monitoring results.
Tr.: transfusion, BUN: Blood Ure Nitrogen, Cre: Creatinin, INR: International Normalized Ratio, I.bil: Indirect bilirubin, T.bil: Total bilirubin, CRP: C-reactive protein.

[Abstract:2703]

PARTICULARITIES OF PELVIC VEIN THROMBOSIS

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Introduction: Pelvic vein thrombosis (PVT) is a rare condition that often occurs in the context of pregnancy or in postpartum after caesarean delivery. However, case reports of nonpuerperal patients presenting with idiopathic and acquired PVT are reported. This study aims to describe the epidemiology, clinical features, laboratory and imaging findings of PVT in a Tunisian cohort.
Methods: We conducted a retrospective study including clinical records of patients with PVT admitted to the internal medicine department of La Rabta Hospital, Tunis, Tunisia between 2004 and 2019.
Results: We enrolled 12 patients, 8 female and 4 male. The mean age was 32.58 years [19-54.]. Five patients had a personal history of thromboembolic disease. Three patients had a history of recent abdominal or pelvic surgery. No patient had a history of pelvic trauma or cancer before onset symptoms. PVT occurred during pregnancy in one patient. PVT was associated with deep venous thrombosis in 6 patients. The other venous locations were pulmonary (n=3), lower limb (n=3), superior vena cava (n=1) and upper limb (n=1). Two patients had more than one venous thromboembolic location. Identified thromboembolic risk factors were long bed rest (n=3), obesity (n=1), constitutional thrombophilia (n=1) and hyperhomocysteinemia (n=1). Chronic inflammatory disease was diagnosed in five patients: antiphospholipid syndrome (n=2), systemic lupus erythematosus (n=2) and Behçet disease (n=1). One patient was diagnosed with Hodgkin's lymphoma. All patients underwent anticoagulant treatment. The thromboembolic disease was recurrent in two patients.
Conclusions: PVT is rare but is associated with significant morbidity and mortality. It is important to recognize this entity to promptly diagnose and treat the etiological factors.

Keywords: thromboembolic disease, pelvic vein thrombosis

[Abstract:2741]

AN UNCOMMON CASE OF HIGH ANION GAP METABOLIC ACIDOSIS DUE TO CHRONIC PARACETAMOL USE

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Introduction: Metabolic acidosis is commonly encountered in clinical practice particularly among critically ill patients. We report a case of high anion gap acidosis due to chronic paracetamol use.
Case Presentation: A 45-year-old female with diabetes mellitus presented with shortness of breath. She was evaluated for menorrhagia with pelvic pain and was awaiting a hysterectomy. On examination she was pale and had Kussmaul breathing. Her haemoglobin was 7 g/dL and ABG revealed severe high anion gap metabolic acidosis with a normal lactate level and liver functions were normal. A presumptive diagnosis of sepsis with acute kidney injury leading to acidosis was made. Despite hydration, antibiotics and multiple IV $NaHCO_3$ corrections she remained profoundly acidotic and was haemodialysed. Her inflammatory markers, serum creatinine improved but she remained acidotic. On further questioning she admitted taking 2-3 g of paracetamol daily for the past six months never exceeding the therapeutic dose. Paracetamol was withheld and IV N Acetyl Cysteine given. Over the next 48 hours her acidosis dramatically improved. High Pyruvic acid levels in urine confirmed the diagnosis.
Discussion: Chronic paracetamol ingestion in nontoxic doses is being increasingly reported as a cause for high anion gap acidosis. This is a separate entity from the acidosis that results from paracetamol toxicity which is due to liver derangement and lactic acidosis. Paracetamol causes depletion of glutathione and this impacts on the gamma glutamyl cycle causing accumulation of

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5-oxyproline/pyruvic acid. Clinicians should be aware of this rare effect that can occur with long term paracetamol use.

Keywords: *high anion gap acidosis, paracetamol, pyruvic acid*

[Abstract:2806]

RESULTS OF A TRAINING SURVEY AMONGST EUROPEAN INTERNAL MEDICINE RESIDENTS TO INFORM FUTURE TRAINING AND CURRICULUM REQUIREMENTS

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The European Board of Internal Medicine created a survey to examine the current state of postgraduate training, the working conditions and subjective assessment of the Internal Medicine residents across the European countries of the UEMS. The aim was to understand the situation to inform future revisions of the European Training Requirements of Internal Medicine and the proposed activities of the European Board.

A hundred question online survey was sent via weblink to the National Internal Medicine societies. This comprised sections on the organisation of hospitals, work-based assessments and supervision, procedures, curriculum, the need for a European exam, and subjective questions on working conditions including stress and work-life balance.

The survey opened in August 2019 and closed in July 2023. There were 571 respondents with 369 total responses completed for all questions. There were several reminders to complete the survey and this was promoted through social media and the young internist organisations of the National Societies.

The results show a heterogenous situation between countries. There are also common shared issues including work-life balance and burnout. Seventy percent of respondents stated there is only a slight chance at best that they would leave Internal Medicine within the next five years. Fifty-five percent of respondents disagreed that their work schedule gave them enough time for their personal and family life. More of the respondents come from countries in the south of Europe than elsewhere.

Keywords: *training, internist, curriculum, burnout, organisation*

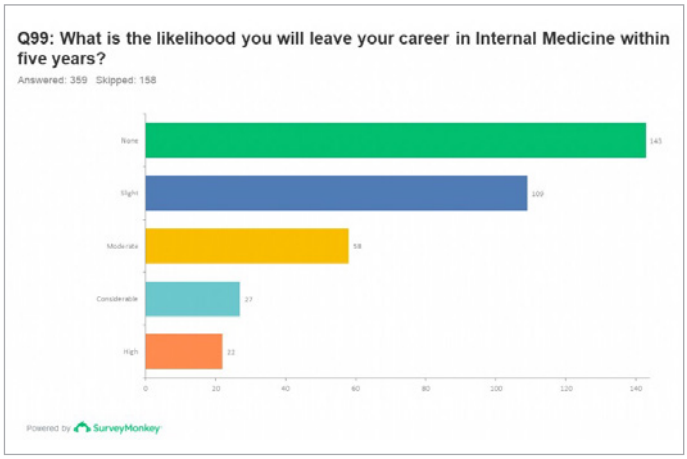

Figure 1. *Survey data.*
This shows the results from the question from whether Internal Medicine residents may leave their chosen specialty within the next five years.

Figure 2. *Survey data.*
This shows the question results from the question from whether Internal Medicine residents agree that their work schedule leaves them sufficient time for their personal and family life.

[Abstract:2918]

CD59 RELATED RHABDOMYOLYSIS

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Case Description: We present a case of complement induced Rhabdomyolysis and associated acute kidney injury.

This is the first case reported in the world based on our extensive research. The Patient is 38 years old with a known history of acquired hemolytic anemia, experienced an acute episode of hemolysis.

He had active hemolysis secondary to hemolytic anemia with acute kidney injury. Laboratory findings revealed features of intravascular hemolytic anemia, low haptoglobin, high LDH, indirect hyperbilirubinemia, elevated creatinine, urine myoglobin and creatine kinase, which reflects acute hemolysis,

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rhabdomyolysis and acute kidney injury, stage III AKI secondary to pigment nephropathy due to heme and myoglobin.

Diagnostic Pathways: Flow cytometry analysis demonstrated PNH clone within the granulocytes (95.765%). These findings align with a diagnosis of paroxysmal nocturnal hemoglobinuria (PNH). Extra special tests confirmed that this patient hasd elevated level of terminal complement C5b-9. The level was high due to deficiency of CD59 which is a regulator protein. In the absence of this protein patients can have rhabdomyolysis and elevated level confirms CD59 deficiency. The patient was treated initially with steroids and then was given eculizumab, with no further episode of hemolysis.

Discussion and Learning Points: Complement plays a significant role in the body's immune defence mechanism, influencing the inflammatory reaction. Complement plays a pathological role in various renal diseases. This case represents the first instance demonstrating that that unregulated complement activation can lead to cellular damage, affecting red blood cells, muscles and renal tissue.

Keywords: *acute kidney injury, paroxysmal nocturnal hemoglobinuria*

[Abstract:2921]

A NUMERICAL APPROACH OF A PARTICULAR SYSTEM OF FRACTIONAL DIFFERENTIAL EQUATIONS FOR THE RUBELLA DISEASE MODEL

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Rubella is an infectious disease caused by an RNA virus. Although its incidence is decreasing and is one of the diseases which could be eradicated based on the World Health Organization, there are still new cases occurring in several countries around the world. In this study, we consider a fractional dynamical system which aims at elucidating a model of rubella disease. The model is formulated using both conventional fractional differential equations and their Caputo-Fabrizio fractional derivative form. Our approach uses a numerical method, specifically a modified spectral collocation technique that employs a combined spectral matrix collocation strategy. This method is tailored to effectively solve the system of fractional differential equations, including initial conditions. The study includes a brief investigation of the existence, uniqueness and convergence of the technique. The aim is to set the stage for future research, not only by improving the existing methodology, but also by introducing an innovative framework for obtaining numerical solutions to challenges addressed in the current literature. In addition, the research discusses key findings from the system and presents visualisations to elucidate its behaviour, including the time evolution with respect to specific parameters.

Keywords: *disease modelling, rubella disease, Taylor series, convergence analysis, numerical simulation*

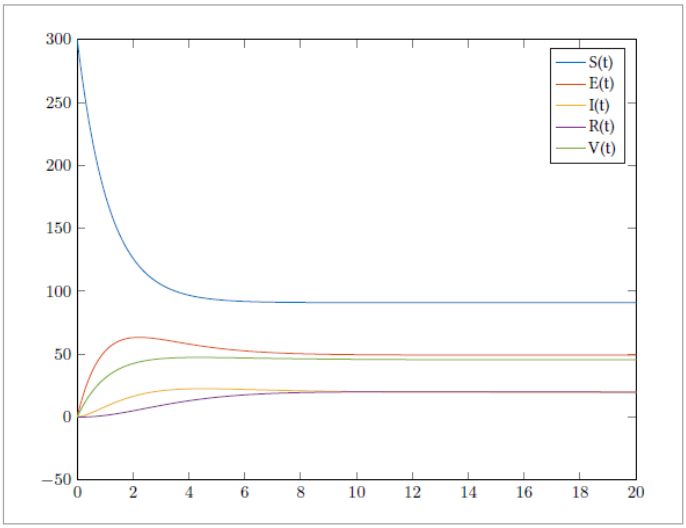

Figure 1. *Plot of all variables for Taylor collocation method for α = 0.9.*

[Abstract:2996]

PREVALENCE AND SPECTRUM OF DISEASES IN AN UNSELECTED RURAL POPULATION IN ROMANIA: A COMPREHENSIVE ANALYSIS

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Background: This study aims to explore the health profile of 1,245 unselected individuals in 12 villages in different areas of rural Romania, contributing valuable insights for tailored healthcare strategies.

Objectives: The research identifies and analyzes the most frequent diseases in rural communities. It assesses cardiovascular diseases, metabolic disorders, laboratory findings, gastrointestinal and ophthalmological concerns, and dermatological issues.

Methods: With no specific inclusion criteria, the study was conducted from March to November 2023, ensuring a representative sample from diverse rural demographics. Each participant underwent blood tests and a complete medical check-up by qualified professionals, allowing an unbiased examination of the health profile.

Results: The study reveals a significant prevalence of cardiovascular diseases, with hypertension (426) and ischemic heart disease (174) as prominent diagnoses. Metabolic disorders, including dyslipidemia (566) and hyperglycemia (489), constitute a substantial burden. Thyroid disorders (184) and gastrointestinal ailments (558), including hepatic steatosis (260) and H. pylori infections (199), are also prevalent. Ophthalmological conditions (757), including refractive errors (426) and cataracts (141), along

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with dermatological concerns, including suspected malignant lesions (15), were observed.

Conclusions: The study underscores the prevalence of significant health issues in Romania's unselected rural population. Hypertension, ischemic heart disease, dyslipidemia, diabetes, thyroid disorders, gastrointestinal ailments, refractive errors, cataracts, and suspected malignant lesions emerge as the most frequent diseases, providing insights for tailored healthcare interventions in diverse rural communities.

Keywords: *prevalence of cardiovascular diseases, hypertension, metabolic diseases*

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