ONCOLOGIC AND HEMATOLOGIC DISEASES

[Abstract:0023]

THE EFFECT OF SARCOPENIA AND SARCOPENIC OBESITY ON SURVIVAL IN GASTRIC CANCER

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Background: Sarcopenic obesity arises from increased muscle catabolism triggered by inflammation and inactivity. Its significance lies in its role in morbidity and mortality in gastric cancer. This study aims to explore the potential correlation between sarcopenia, sarcopenic obesity, and gastric cancer, and their effect on survival.

Materials and Methods: This retrospective study included 162 patients aged ≥18 years who were diagnosed with stomach cancer. Patient age, gender, diagnostic laboratory results, and cancer characteristics were documented. Sarcopenia was assessed using skeletal muscle index (SMI) (cm^2/m^2), calculated by measuring muscle mass area from a cross-sectional image at the L3 vertebra level of computed tomography (CT).

Results: Among the 162 patients, 52.5% exhibited sarcopenia (with cut-off limits of 52.4 cm^2/m^2 for males and 38.5 cm^2/m^2 for females), and 4.9% showed sarcopenic obesity. Average skeletal muscle area (SMA) was 146.8 cm^2; SMI was 50.6 cm^2/m^2 in men and 96.9 cm^2 and 40.6 cm^2/m^2 in women, respectively. Sarcopenia significantly reduced mean survival (p=0.033). There was no association between sarcopenic obesity and mortality (p > 0.05), but mortality was higher in sarcopenic obesity patients (p=0.041). Patient weight acted as a protective factor against mortality, supporting the obesity paradox. Tumour characteristics, metabolic parameters, and concurrent comorbidities didn't significantly impact sarcopenia or mortality.

Conclusions: Sarcopenia is more prevalent in elderly population and is linked to increased mortality in gastric cancer patients. Paradoxically, higher body mass index (BMI) was associated with improved survival. Computed tomography offers a practical and reliable method for measuring muscle mass and distinguishing these distinctions.

Keywords: *computerized tomography, gastric cancer, obesity, sarcopenia, sarcopenic obesity, skeletal muscle index*

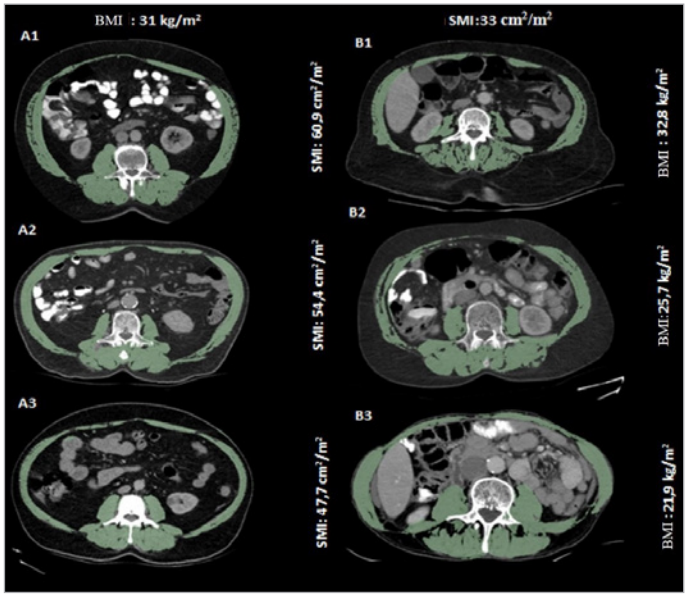

Figure 1. *Skeletal muscle index measurements on CT sections through the L3 vertebra level. Left:Different SMI values of patients with the same BMI (31 kg/m²), respectively A1: 60,9 cm2 /m2, A2: 54,4 cm² / m², A3: 47,7 cm²/m². Right: Different BMI values of patients with the same SMI (33 cm²/m²), respectively B1: 32,8 kg/m² B2:25,7 kg/m2, B3: 21,9 kg/m².*

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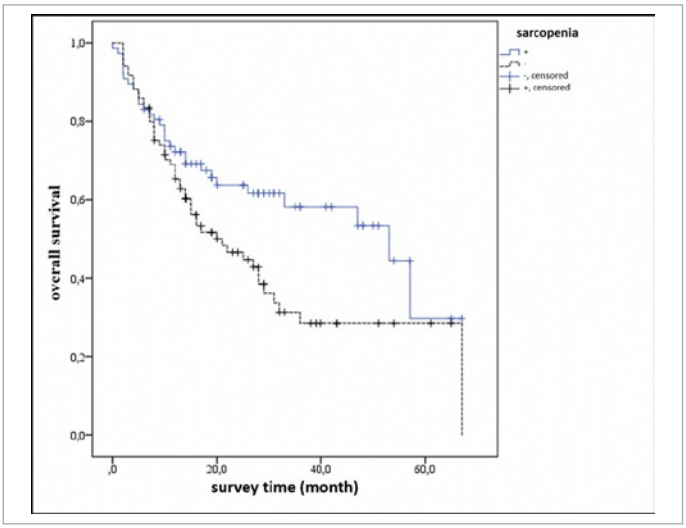

Figure 2. Survival curve according to sarcopenic status. The blue lines show the patient group without sarcopenia, and the black line indicates the sarcopenic patient group. Overall survival is shown as a percentage. Survival time is reduced in patients with sarcopenia.

[Abstract:0046]

EBER POSITIVE NK/T CELL LYMPHOMA WITH A PRESENTATION OF HEMOPHAGOCYTIC LYMPHOHISTIOCYTOSIS

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Case Description: A 41-year-old male was admitted to the clinic with fever, myalgia, and jaundice. Physical examination revealed hepatomegaly and splenomegaly. Laboratory investigation showed pancytopenia, elevated liver enzymes with hyperbilirubinemia, acute kidney injury, and hyperferritinemia.

Clinical Hypothesis: Hemophagocytic lymphohistiosis (HLH) was considered, and Bone marrow smear and biopsy confirmed the HLH. (Figure 1) Epstein-Barr viremia (EBV-DNA: 46.320 copy) was detected as a common cause of HLH. Rheumatic disease and other infectious reasons were excluded. However, multiple nodular lesions in the lung (Figure 2) and an ulcerated skin lesion at the left scapular area were suspected of malignancy.

Diagnostic Pathways: Etoposide, dexamethasone, and IVIG treatment were initiated for controlling HLH. EBV progression continued under the intravenous acyclovir treatment. Serum galactomannan and culture for fungal infection resulted in a negative for the investigation of invasive pulmonary aspergillosis. A biopsy of both lung and skin lesions was performed. Pathological investigation revealed CD3, CD2, and CD7 positivity with expression of EBER. These findings were consistent with EBER-positive NK/T cell Lymphoma.

Discussion and Learning Points: HLH is a rare but life-threatening condition resulting from severe hyperinflammation caused by the uncontrolled proliferation of activated lymphocytes and macrophages. Primary HLH is caused by syndromes associated with genes; however, secondary HLH is associated with lymphoproliferative disorders, rheumatic diseases, infections, and immune-deficiency disorders. Sustained EBV infection could have resulted in haematological malignancies. In our case, both secondary causes of HLH were revealed in a significant relationship.

Keywords: *lymphoma, hemophagocytic lymphohistiocytosis, ebv*

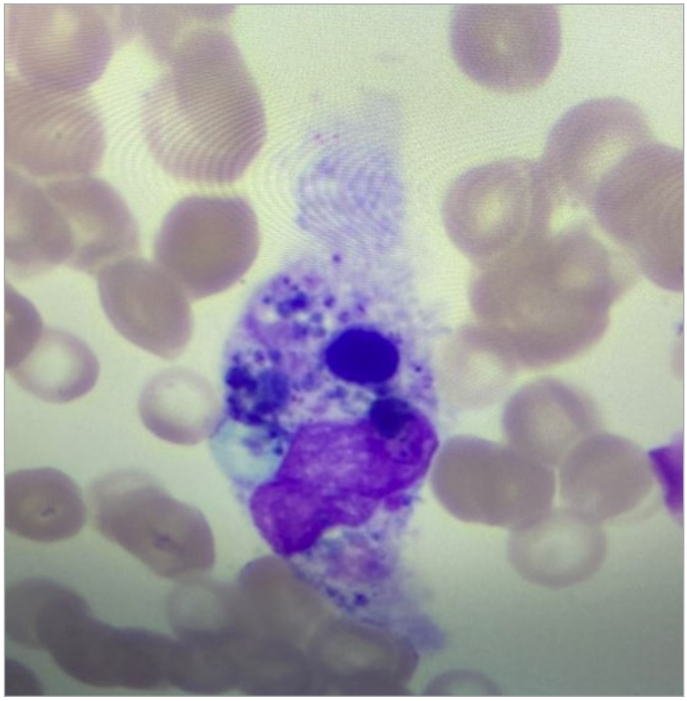

Figure 1.

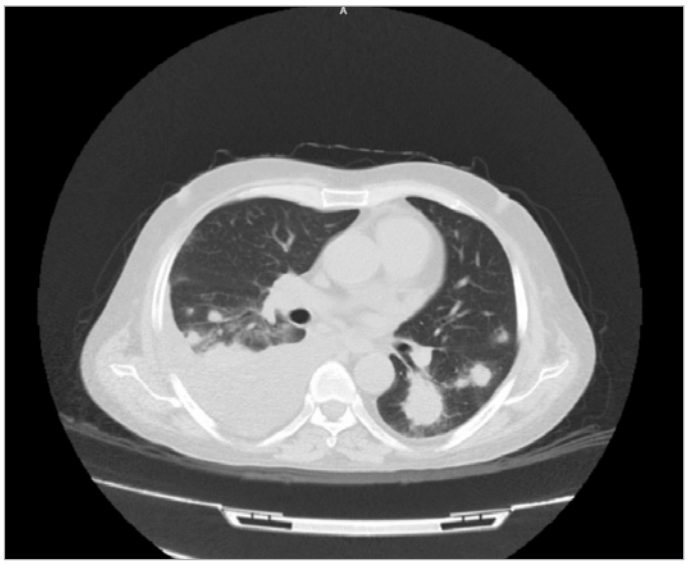

Figure 2.

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[Abstract:0050]

SPONTANEOUS ILIOPSOAS HAEMATOMA SECONDARY TO ANTICOAGULATION

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We present two cases of spontaneous iliopsoas haematoma (IPH) following anticoagulation to highlight this rare but severe complication.

Case 1: A 78-year-old gentleman presented with exertional dyspnoea was found to have bilateral pulmonary embolism (PE) without right heart strain (RHS) on computed tomography pulmonary angiogram (CTPA). After 4 days of Enoxaparin treatment, he complained of new onset severe left hip pain. His haemoglobin level dropped from 13.3 g/dL to 8 g/dL. The computed tomography of abdomen and pelvis (CTAP) revealed a left IPH. Anticoagulation was stopped and an inferior vena cava (IVC) filter was inserted. Anticoagulation was restarted at prophylactic dose 2 weeks later and was gradually titrated to full therapeutic dose.

Case 2: A 72-year-old lady was admitted for 2 days of dyspnoea. CTPA showed bilateral PE with RHS. The troponin level was raised. She underwent catheter directed thrombolysis on the admission day. She complained of new onset right hip pain on day 9 of admission while receiving Enoxaparin. CTAP showed a large right IPH. Anticoagulation was stopped and an IVC filter was inserted. Patient passed on despite undergoing angio-embolisation and supportive care at the intensive care unit.

Discussion: 1. Spontaneous IPH is a rare complication of anticoagulation. It is usually unilateral though bilateral cases have been reported.

2. Presentations are non-specific: pain in abdomen, back or groin, leg weakness or anaemia. These symptoms often have other clinical explanations.

3. CTAP is a sensitive diagnostic tool.

4. Conservative management (anticoagulation cessation, transfusion) is adequate.

5. Consider arterial embolization or surgery if severe.

Keywords: *haematoma, iliopsoas, anticoagulation, psoas, warfarin, heparin*

[Abstract:0053]

PRIMARY TESTICULAR LYMPHOMA. CLINIC CASE AND BIBLIOGRAPHIC REVIEW

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54-year-old man came to the outpatient clinic due to pain in the right renal fossa of 1 week's duration, with nausea and accompanying voiding syndrome. No personal history of interest except L4L5 disc herniation with associated radiculopathy, no prior treatment except analgesia. Physical examination was normal, hemodynamically stable and afebrile, with a normal abdomen. Testicular examination with induration of approximately 2-3 cm in the middle third of right testicle, solid and adherent.

Laboratory blood tests were normal; renal function and ionogram (creatinine 0.95 mg/dL, CKD-EPI 87 mL/min/1.73m^2, lactate dehydrogenase 170 U/L, sodium 142 mEq/L, potassium 4.9 mEq/L), haemoglobin 14.8 g/dL with haematocrit 44.0%, leukocytes 4.120/µl (neutrophils 37.1 %, lymphocytes 50.0 %), platelets 216000/µl with normal coagulation study.

Abdominal ultrasound was performed with the absence of structural pathology, and testicular ultrasound confirmed the exploratory findings (neoformation in the middle third with anechoic and solid images inside with heterogeneous characteristics, highly suggestive of testicular tumour). Inguinal orchiectomy was performed with a pathological diagnosis compatible with diffuse large B cell lymphoma (with infiltration of the epididymis and spermatic cord; pT3, pNx).

Testicular lymphoma is a very rare entity, despite being considered the most common testicular tumour in patients over the age of 60 years. Most of them are non-Hodgkin diffuse, intermediate or high grade of malignancy, B-cell immunophenotype, being T-cell exceptional. Prognosis is poor due to their high tendency to systemic dissemination. The treatment is based on orchiectomy, chemotherapy and radiotherapy.

Keywords: *testicular lymphoma, cancer*

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[Abstract:0094]

THE CONSTANT MIMIC DISEASE: ANGIOIMMUNOBLASTIC T-CELL LYMPHOMA, A MIMIC FOR DRESS SYNDROME

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A 71-year-old man natural from Spain was admitted from the emergency department after developing over the last 2 weeks a maculopapular exanthema on the chest, superior members and back. His medical history included a recent diagnosis of a drug induced cutaneous reaction by NSAIDs, that was followed by the Allergology department. His usual treatment. The usual treatment consisted of NSAIDs and olmesartan.

He presented a painless, pruriginous and rapidly progressing erythroderma with non-desquamative lesions (Figure 1), and B symptoms. Laboratory test showed elevation of acute phase reactants. All microbiological serologies and autoimmune markers were negatives with a PET-CT revealing generalized lymphadenopathies with hypermetabolic activity (Figure 2). By this time, the patient accomplished five out of the six clinical criteria for the DRESS syndrome. Because of this, we performed a lymphadenopathy biopsy to rule out the possibility of lymphoproliferative disorder.

Given the clinical history, added to the negativity of all the rest of complementary tests, a DRESS syndrome suspicion was establish, pending the exclusion of an underlying process.

The anatomopathological findings were compatible with an angioimmunoblastic T-cell lymphoma, showing a proliferation of medium-sized round cells with clear cytoplasm and minimal cytological atypia (Figure 3). Once the diagnosis was established, intermediate corticosteroids doses were initiated, with an excellent response and practical disappearance of the skin lesions (Figure 4) and clinical improvement.

AITL is a rare but aggressive entity primarily affecting T-cells within the lymphatic system. Its diagnosis and treatment pose a challenge, requiring careful evaluation and multidisciplinary management.

Keywords: *angioimmunoblastic T-cell lymphoma, DRESS syndrome, eosinophilia*

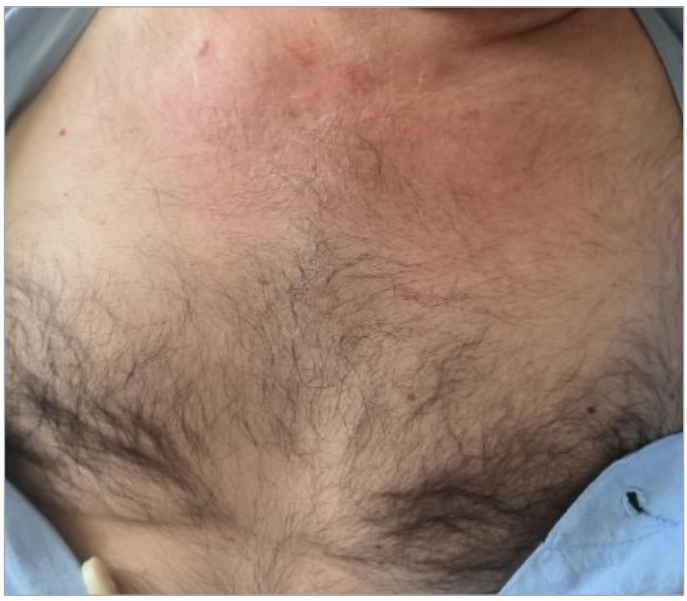

Figure 1. *Case Description. It is marked on the text.*

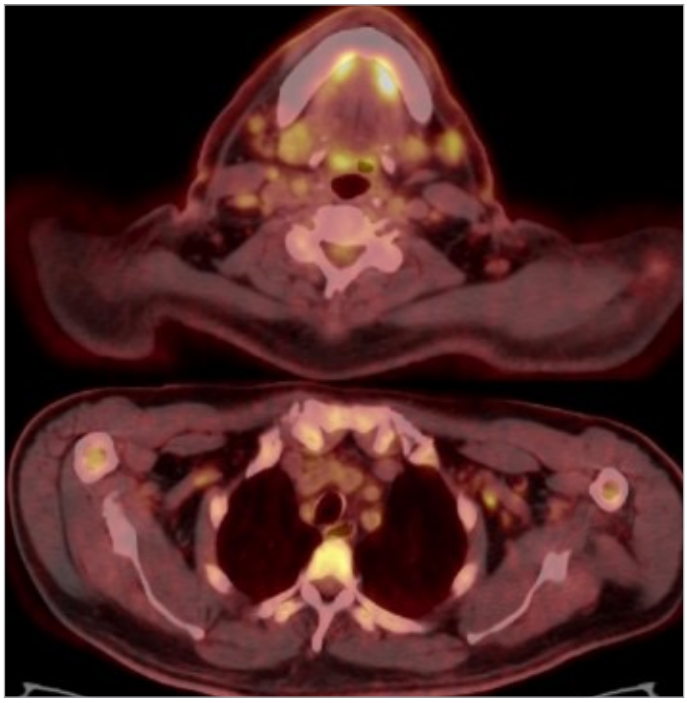

Figure 2. *Case Description. It is marked on the text.*

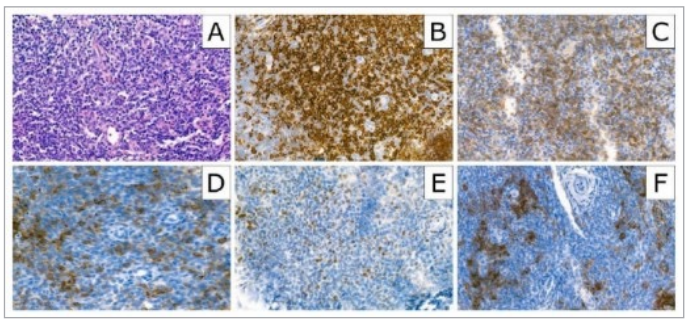

Figure 3. *Case Description. It is marked on the text.*

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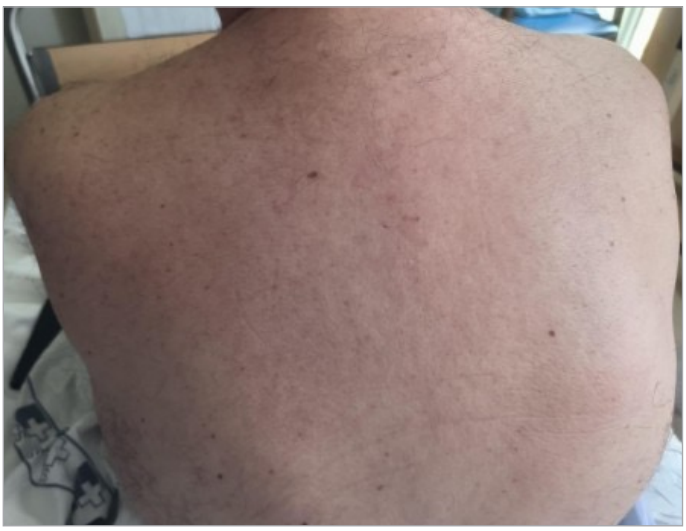

Figure 4. Case Description. It is marked on the text.

[Abstract:0110]

EFFECT OF LOW-DOSE CIDOFOVIR TREATMENT ON BK VIRUS-INDUCED HEMORRHAGIC CYSTITIS PRESENTING AFTER ALLOGENEIC HEMATOPOIETIC STEM CELL TRANSPLANTATION: CASE REPORT

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Case Presentation: A 32-year-old who has Philadelphia chromosome-positive Precursor B-cell acute lymphoblastic leukaemia and had an allogeneic bone marrow transplantation (BMT) 9/10 match from the donor of bone marrow biobank of Turkey previously applied to our hospital. Unfortunately, the disease had relapsed 5 months after BMT. Blinatumomab treatment had started, full remission achieved after two cycles of therapy. In January 2023, a haploidentical allogeneic BMT was made from his father with 5/10 match. One month after transplantation, the patient had microscopic haematuria and dysuria.

As the patient had BMT, BK virus nephropathy was the main differential diagnosis, and a sample for the quantitative polymerase chain reaction (PCR) was obtained. The copy number of BK virus DNA in the urine sample was 299176129 (copy/ML), and the copy number in the blood sample was 295 (copies/ml). The patient was evaluated as grade 3, late onset haemorrhagic cystitis. In the light of current literature, intravenous low dose cidofovir therapy (1mg/kg) administered weekly for five weeks with close monitoring of renal functions. After one dose of cidofovir along with bladder irrigation macroscopic haematuria resolved. Clinical and measurable microbiological response was achieved with two doses. BK virus real time PCR level decreased to 32 copies/mL in the blood sample and to 532256 (copy/ml) in the urine sample. During the five-week treatment follow-up, macroscopic haematuria did not develop and creatinine values decreased to normal limits.

Discussion: We observed positive results by applying intravenous low-dose cidofovir treatment. Cidofovir is considered an effective treatment for haemorrhagic cystitis due to BK virus. It should be considered that low-dose cidofovir may be a treatment option in cases where renal toxicity must be avoided, as in our case.

Keywords: *BK virus-induced haemorrhagic cystitis, intravenous cidofovir treatment, allogenic bone marrow transplantation*

[Abstract:0117]

A RARE CASE OF METASTATIC PANCREATIC ADENOCARCINOMA PRESENTING AS A MULTIPLE STROKES FROM NONBACTERIAL THROMBOTIC ENDOCARDITIS

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Non-bacterial thrombotic endocarditis (NBTE) is a condition that occurs due to hypercoagulability in malignant patients. NBTE in patients with pancreatic cancer is more often diagnosed post-mortem. Our patient was diagnosed with malignancy as a complication of NBTE. In our case, multiple ischemic lesions were seen in the cranial imaging of the patient who presented to the emergency room with the complaint of personality change and newly developed disturbance of consciousness. Abdominal imaging performed to elucidate the clinical features showed lesions in the liver and pancreas which were thought to be due to malignancy in the foreground, and further studies performed for cardioembolic source showed an appearance compatible with vegetation in the mitral valve. As multiple blood cultures were sterile, imaging features is malignant in appearance and patient lacked clinical signs of infection, an underlying malignancy was suspected. NBTE was considered in the patient whose liver biopsy was compatible with primary pancreatic liver metastasis. We report a rare case of NBTE in patients with pancreatic cancer, in which neurological symptoms preceded the diagnosis of pancreatic cancer.

Keywords: *nonbacterial thrombotic endocarditis, stroke, pancreatic cancer, mitral valve*

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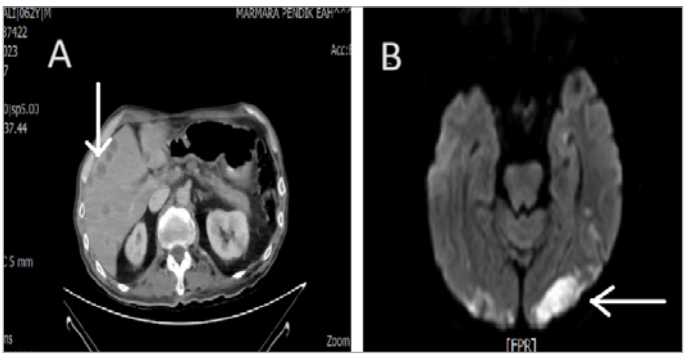

Figure 1. (A) Abdominal CT shows several hypodense lesions (metastases) in the liver. (B) Brain MRI shows embolic appearance in cerebral hemispheres showing diffusion limitations.

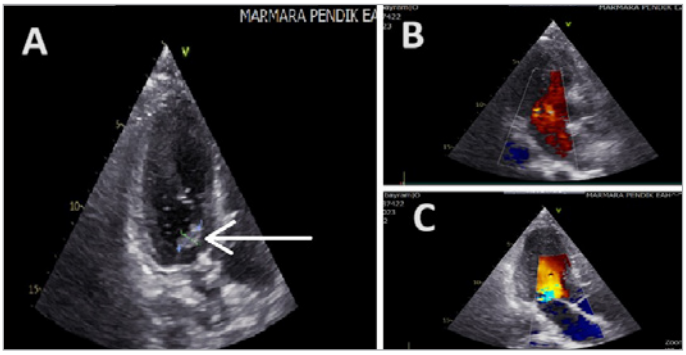

Figure 2. (A) Transoesophageal echocardiography showing a 12x9 mm vegetation on the anterior leaflet of both mitral valve leaftles. (B and C) The presence of mitral valve regurtitation.

[Abstract:0122]

"WHAT NOW? CAN I NO LONGER EAT FAVA BEANS?" – AN UNCOMMON CASE OF GLUCOSE-6-PHOSPHATE DEHYDROGENASE DEFICIENCY

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Haemolytic anaemia (HA) is characterized by diminished haptoglobin, increased lactate dehydrogenase (LDH), indirect hyperbilirubinemia, and changes in blood smear, frequently caused by haemoglobinopathies. Glucose-6-phosphate dehydrogenase (G6PD) deficiency is a rare cause, usually diagnosed during childhood, associated with triggering factors, such as fava bean consumption.

A 32-year-old woman from Nepal, living in Portugal, without previous medical history, was admitted to the hospital with a five-day history of asthenia, jaundice, abdominal pain, and dark urine. She described previous similar self-limited episodes, but no consumption of drugs, herbalist products or food outside her usual pattern. Blood tests revealed anaemia with haemoglobin at 7.3 g/dL, normal peripheric blood smear, slightly increased LDH levels (238 U/L) and indirect hyperbilirubinemia (total bilirubin 7.42 mg/dL, direct 0.54 mg/dL). All symptoms resolved two days after admission, and haemoglobin spontaneously increased. Haptoglobin dosing, haemoglobin electrophoresis, and osmotic frailty test were normal, Coombs test negative, and an abdominal ultrasound excluded hepatosplenomegaly. Finally, G6PD dosing was decreased (6.9 U/g Hgb) and the patient confirmed ingestion of fava beans prior to the current episode and frequently throughout her life.

Although more common in men, since the gene that codifies for G6PD is on the X chromosome, women can also have G6PD deficiency, being heterozygotic. In these cases, the ratio between normal and G6PD-deficient erythrocytes can vary during their life with fluctuating clinical manifestations, making this deficiency underdiagnosed. This case emphasizes that this G6PD-deficiency should be searched for in adults and the importance of a detailed clinical history, including food habits, even when a linguistic barrier exists.

Keywords: *glucose-6-phosphate dehydrogenase deficiency, G6PD deficiency, haemolytic anaemia, fava bean*

[Abstract:0124]

ANAEMIA IN PATIENTS ADMITTED TO THE INTERNAL MEDICINE SERVICE OF A TERTIARY HOSPITAL

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This study was aimed to investigate the prevalence and aetiology of anaemia and to evaluate the diagnostic tests and treatments required. It is a retrospective review of patients admitted to the internal medicine department of a tertiary hospital in a selected month.

Out of 201 admissions, 97 patients were found to have anaemia, defined as haemoglobin below 12 mg/dL in women and 13 mg/dL in men. The mean age was 80 years, and the mean haemoglobin at admission was 9.8 mg/dL. Most cases (59.8%) were normocytic, followed by microcytic (36.1%) morphology. Anaemia was acute or unknown in 25% of cases, exacerbation of a chronic condition in 20.8%, and stable chronic anaemia in 54.2%. The aetiology was unclear in 22.7% of cases, with multifactorial (20.6%), digestive (18.6%), and nutritional (16.5%) causes being the most frequent.

Only 18.5% of patients required endoscopic examination, 23.7% needed red blood cell transfusion (most of them required 2 or fewer units), and 6.2% received intravenous iron. The study has some limitations, including its short duration and the need for further investigation into specific aspects such as comparison of anaemic patients with and without anticoagulant treatment and considering underlying conditions.

In conclusion, anaemia is present in almost half of the admitted

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patients, particularly in elderly individuals who often have multiple comorbidities and polypharmacy. Given the potential complications of anaemia in these patients, careful monitoring and early iron therapy should be considered to reduce the need for transfusions.

Keywords: *anaemia, retrospective study, haemoglobin, iron deficiency*

Patients with anaemia	97 (48.3)
Women	53 (54.6)
Age	80.7 ± 11.1 (58.5-102.9)
Previous antiaggregant treatment	29 (29.9)
Previous anticoagulant treatment	38 (39.2)

Table 1. *Baseline Characteristics of Patients. Values represent n (%) or mean ± 2 standard deviations.*

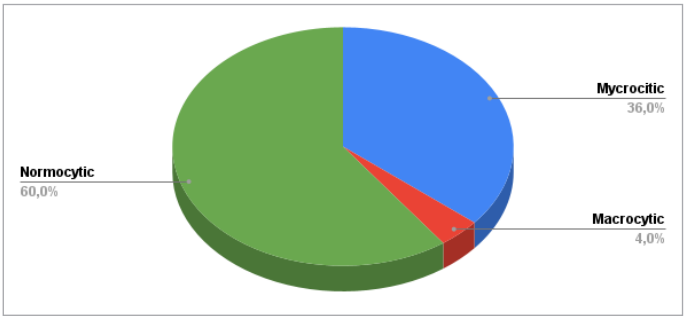

Figure 1. *Anaemia types*

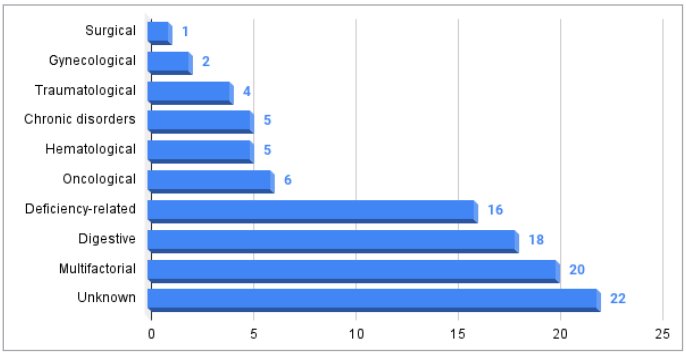

Figure 2. *Etiopathogenesis of the anaemia.*
The numbers represent the percentage of the total patients with anaemia caused by each reason.

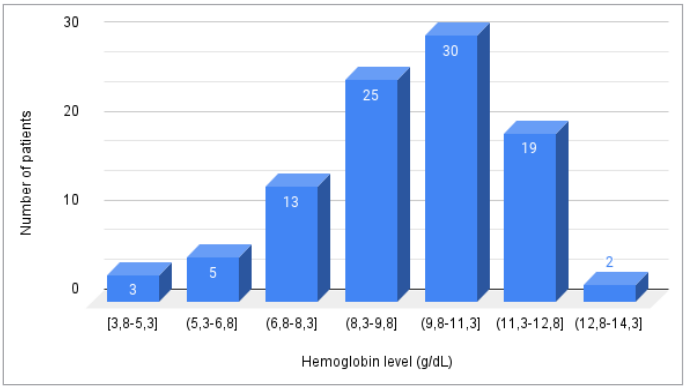

Figure 3. *Haemoglobin at admission.*

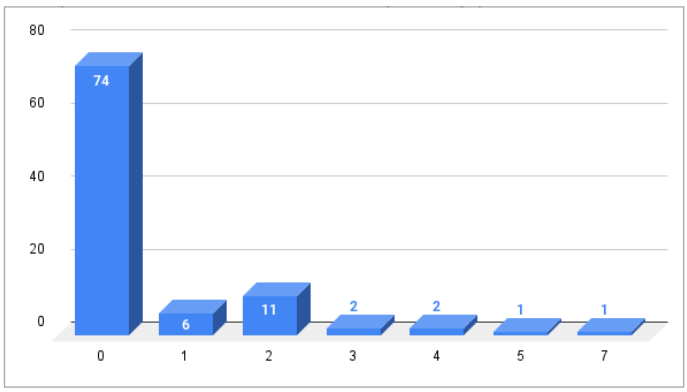

Figure 4. *Number of transfusions required by patient.*

[Abstract:0127]

A RARE CASE OF CHOLANGIOCARCINOMA RELATED DERMATOMYOSITIS SINE DERMATITIS

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Summary: Paraneoplastic syndromes are the symptoms or signs which result from damage to tissues that are distant from the site of malignancy, due to complex interactions between the body's immune system and malignant neoplasm.
Cholangiocarcinoma is an aggressive epithelial malignancy of hepatobiliary tree and it is found to be associated with various paraneoplastic syndromes.
Purpose: To present a rare case of cholangiocarcinoma related dermatomyositis sine dermatitis with acute kidney injury and the impressive response to glucocorticoid therapy.
Methods: We report a case of a patient with cholangiocarcinoma related dermatomyositis sine dermatitis that was hospitalised in the Internal Medicine Clinic due to rhabdomyolysis, acute kidney injury, hyperkaliaemia and hypovolemic shock.
Findings: A 62 year old male was admitted to the hospital due to diarrhoea and inability to walk for 2 days. Physical examination revealed low blood pressure, 75/55 mmHg, normal body temperature,36.5°C, and oxygen saturation 99% on room air. The initial laboratory investigations demonstrated markedly elevated creatine kinase (43.459 U/L; normal 60-220 U/L), significant renal impairment (creatinine: 7.02 mg/dl; normal 0.5-1.20 mg/dl), uraemia (Urea :295 mg/dl, normal 10-50 mg/dl) and hyperkaliaemia (potassium: 5.9 meq/L; normal 3.5-5 meq/L). No heliotrope rash or Gottron's papules were noted.
Aggressive fluid resuscitation was initiated, noradrenaline infusion, sodium bicarbonate and antibiotic coverage with piperacillin/tazobactam.
The patient though only responded as soon as high dose corticosteroids (dexamethasone 24 mg) were initiated, with gradual decrease in creatine kinase values.
Conclusions: We should always consider a possible paraneoplastic

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syndrome in a patient with a known malignancy presenting with unusual symptoms.

Keywords: *paraneoplastic syndrome, dermatomyositis, rhabdomyolisis, cholangiocarcinoma*

[Abstract:0131]

THIOL-DISULFIDE AND ISCHEMIA MODIFIED ALBUMIN BALANCE BEFORE AND AFTER CHEMOTHERAPY IN PATIENTS DIAGNOSED OF OVARY CARCINOMA

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Aim: Our study aims to evaluate changes in thiol-disulfide balance and ischemia-modified albumin (IMA) levels in ovarian cancer patients pre- and post-chemotherapy. Thiols, vital components of total antioxidant capacity and disulfides that rise with oxidative stress, will be investigated. We seek to understand the indirect effects of chemotherapy on oxidative stress and antioxidant capacity comparing results with a healthy control group.

Materials and Methods: A prospective case-control study was conducted between May 2022 and May 2023 at Bilkent City Hospital in Ankara, Turkey. We enrolled 42 ovarian cancer patients and 51 healthy volunteers. After an 8-hour fast, venous blood samples were collected and serum levels of total thiol (TT), native thiol (NT), disulfide (DS), and IMA were measured using IBM SPSS Statistics Version 25.0.

Results: Comparing samples taken from patients at diagnosis and healthy controls, we found significantly lower values in native thiol (p=0.000), total thiol (p=0.000), and native thiol/total thiol (p=0.000) pre-chemotherapy. Conversely, disulfide (p=0.001), disulfide/native (p=0.000), and disulfide/total thiol (p=0.000) levels were significantly higher. In ovarian cancer patients, significant differences in CA-125 (p=0.000), native thiol (p=0.019), and total thiol (p=0.025) were noted at diagnosis, pre-chemotherapy, and 3 months post-chemotherapy, with lower values at 3 months. In the group receiving adjuvant chemotherapy, significant differences were observed between diagnosis and 3rd-month values of native thiol, total thiol, disulfide/native thiol, disulfide total thiol, native thiol/total thiol, and IMA (p=0.026).

Conclusions: Ovarian cancer patients exhibit a disrupted thiol-disulfide balance associated with oxidative stress. Monitoring thiol-disulfide homeostasis may guide chemotherapy dose adjustments based on disease progression, chemotherapy complications, toxicities, and treatment objectives.

Keywords: *ovarian carcinoma, chemotherapy, oxidative stress, thiol-disulphide, total antioxidant capacity, ischemia modified albumin*

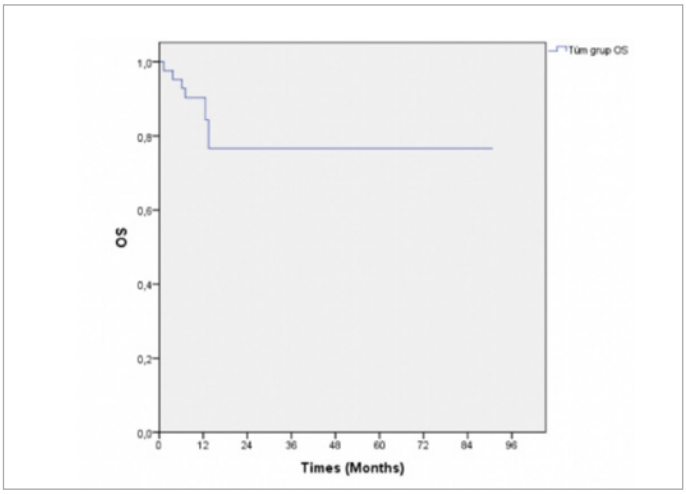

Figure 1. *Graph showing the survival characteristics of the entire patient group showing the Kaplan-Meier curve.*

First line treatment	Variables	In diagnosis Median (IQR)	Third month Median (IQR)	P value
Operation+adjuvant chemotherapy n=18	NT (µmol/L)	468.30 (77.93)	455.55 (81.62)	0.035
	TT (µmol/L)	502.27 (73.60)	488.79 (77.28)	0.043
	DS (µmol/L)	19.52 (7.57)	19.22 (8.03)	0.170
	DS/NT (%)	4.02 (2.83)	4.54 (2.04)	0.035
	DS/TT (%)	3.72 (1.96)	4.17 (1.70)	0.035
	NT/TT(%)	92.56 (4.55)	91.68 (3.41)	0.035
	IMA (ABSU)	0.70 (0.04)	0.68 (0.02)	0.026
NeoAdjuvant chemotherapy+ operation+adjuvant chemotherapy n=15	NT (µmol/L)	414.20 (111.50)	401.10 (114.23)	0.331
	TT (µmol/L)	459.51 (109.36)	449.88 (118.27)	0.272
	DS (µmol/L)	20.68 (5.66)	20.41 (5.93)	0.638
	DS/NT (%)	5.47 (3.04)	4.79 (2.53)	0.551
	DS/TT (%)	4.93 (2.45)	4.37 (2.09)	0.551
	NT/TT(%)	90.14 (4.90)	90.84 (4.16)	0.594
	IMA (ABSU)	0.70 (0.06)	0.70 (0.06)	0.755
Inoperable/in the metastatic stage chemotherapy in disease n=9	NT (µmol/L)	465.50 (123.10)	390.40 (90.50)	0.011
	TT (µmol/L)	496.63 (105.90)	438.45 (82.76)	0.015
	DS (µmol/L)	21.77 (9.10)	24.02 (4.47)	0.086
	DS/NT (%)	4.84 (3.37)	6.15 (2.73)	0.038
	DS/TT (%)	4.41 (2.78)	5.48 (2.12)	0.033
	NT/TT(%)	91.18 (5.56)	89.05 (4.22)	0.028
	IMA (ABSU)	0.70 (0.05)	0.69 (0.07)	0.280

Table 1. *Comparison of thiol-disulfide balance and IMA levels before (0th month) and after (3rd month) chemotherapy according to the first treatment modality applied in the patient group. Wilcoxon test, p<0.05 was considered statistically significant. n=Number of patients.*

[Abstract:0146]

MOLECULAR AND GENETIC PREDICTORS OF ANTHRACYCLINE-RELATED CARDIAC DYSFUNCTION IN WOMEN WITHOUT CARDIOVASCULAR DISEASES: A PROSPECTIVE COHORT STUDY

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Aim: To assess the role of genetic and molecular factors in the development and progression of anthracycline-related cardiac dysfunction (ARCD) in women without previous cardiovascular diseases (CVD).

Methods: Totals of 362 women were enrolled. The serum levels of biomarkers were determined by immunoassay.

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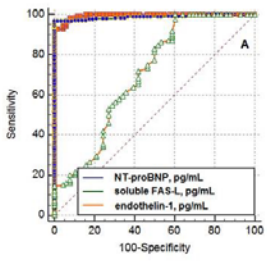
Evaluation of gene polymorphisms was carried out by real-time PCR at baseline.

Results: At 12 months after chemotherapy all women were examined and ARCD was diagnosed in 114 patients (31.49%) (Tab.1). Women with ARCD were observed during next 24 months to evaluate the predictors of adverse outcomes. Based on ROC-analysis, levels of endothelin-1, sFas-L, and NT-proBNP were identified as a cut-off values to predict development of ARCD during 12 months after chemotherapy (Fig.1). The development of ARCD was also related to genotypes of p53 protein, eNOS3, NADPH-oxidase, and GPX1 genes (Tab.2). Based on ROC-analysis, the levels of MMP-2, MMP-9, sST2, and tetranectin were identified as predictors for the adverse course of ARCD during next 24 months (Fig.2). The presence of genotypes of MMP-2, MMP-9, and HIF1alpha genes were related with the adverse course of ARCD (Tab.3).

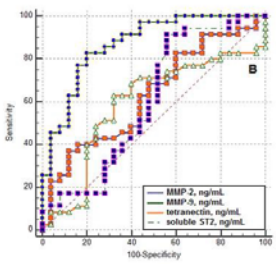
Conclusions: P53 protein, eNOS3, NADPH oxidase, and GPX1 genes may be used as predictors of ARCD development, when MMP-2 and 9, and HIF1alpha genes were related with the adverse course. Serum levels of endothelin-1, NT-proBNP and sFas-L obtained at the end of chemotherapy were identified as predictors of ARCD development, when MMP-2, MMP-9, sST2, and tetranectin obtained at ARCD diagnosis were identified as predictors for adverse course during next 24 months.

Keywords: *anthracyclines, cardiac dysfunction, molecular biomarkers, genes, prognosis*



Based on ROC-analysis, all baseline biomarker concentrations were not identified as predictors of ARCD development. Whereas, endothelin-1, NT-proBNP and soluble Fas-L levels at the end of chemotherapy were identified as predictors of ARCD development during 12 months after chemotherapy. Based on ROC-analysis, levels of endothelin-1 of ≥9.1 pg/mL (sensitivity of 45.8%, specificity of 96.8%, and AUC of 0.701; p<0.001), soluble Fas-L of ≥102.8 ng/mL (sensitivity of 99.1%, specificity of 98.3%, and AUC of 0.992; p<0.001), and NT-proBNP of ≥87.9 pg/mL (sensitivity of 97.3%, specificity of 97.21%, and AUC of 0.990; p<0.001) were identified as a cut-off values predicting development of ARCD during 12 months after completion of chemotherapeutic course. Based on ROC-curve comparison analysis, NT-proBNP and sFas-L were more significant predictors (p<0.001) of ARCD development than endothelin-1.

Figure 1. *ROC-curves of biomarkers in prediction of ARCD development during 12 months after chemotherapy.*



Based on ROC-analysis, the levels of MMP-2 ≥338.8 pg/mL (sensitivity 57%, specificity 78%; AUC=0.65; p=0.003), MMP-9 ≥22.18 pg/mL (sensitivity 89%, specificity 87 %; AUC=0.89; p<0.001), sST2 ≥ 32.4 ng/mL (sensitivity 74%, specificity 76.5 %; AUC=0.79; p=0.002) and tetranectin ≤15.4 pg/mL (sensitivity 69%, specificity 72 %; AUC=0.69; p=0.005) were identified as predictors for the adverse course of ARCD. Based on ROC-curve comparison analysis, MMP-9 concentrations were more significant predictor of ARCD progression.

Figure 2. *ROC-curves of biomarkers in prediction of adverse outcomes of ARCD during 24 months after ARCD development.*

Parameter	Group 1, n=114 ARCD+	Group 2, n=248 ARCD-	p-value
Age (years)	48 (46; 52)	50 (46; 53)	0.918
CD of doxorubicin, mg/sq.m.	360 (300; 360)	360 (300; 360)	0.817
Body mass index, kg/sq.m.	23.7 (21.4; 26.2)	24.1 (22.9; 25.9)	0.781
Heart rate at rest, beats/minute	84 (78; 93)	76 (69; 82)	0.072
Systolic blood pressure, mm Hg	120 (115; 130)	115 (112; 122)	0.153
Diastolic blood pressure, mm Hg	74 (68; 80)	72 (68; 80)	0.614
Current smoker, n (%)	19 (16.7)	37 (14.9)	0.564
Chronic obstructive lung disease, n (%)	13 (11.4)	12 (4.8)	0.515
Childbearing potential women, n (%)	45 (39.5)	79 (31.9)	0.192
Menopause, n (%)	69 (60.5)	169 (68.1)	0.291
eGFR mL/min/sq.m.	84 (78; 96)	88 (76; 98)	0.876
6-minute walk test distance, m	589 (562; 601)	576 (568; 587)	0.291
Total cholesterol, mmol/L	5.2 (4.85; 5.7)	5.1 (4.7; 5.65)	0.872
Haemoglobin, g/L	112 (104; 129)	110 (102; 123)	0.614
Troponin I, ng/mL (0-0.04 ng/mL)	0.028 (0.001; 0.035)	0.012 (0.002; 0.029)	0.061
Left ventricle ejection fraction, %	64.0 (62; 67)	64.5 (62; 69)	0.663
Left atrium, mm	27 (26; 30)	28.5 (27; 31)	0.871
End-diastolic dimension, mm	45.5 (42; 47)	47 (43.5; 49)	0.284
End-systolic dimension, mm	29 (27; 31)	28.5 (26; 30)	0.764
Intraventricular septum, mm	10 (9; 11)	10 (9; 11)	0.992
Left ventricle posterior wall, mm	11 (10; 12)	10 (10; 11)	0.774
LVMMi, g/sq.m.	87 (83; 96)	86.5 (84; 98)	0.101
Global longitudinal strain, %	-20.3 (-18.3; -23.9)	-19.7 (-18.9; -24.1)	0.810

Table 1. *Baseline characteristics of patients before chemotherapy.*

Gene	Genotypes	Group 1, n=114 ARCD+	Group 2, n=248 ARCD-	χ2	OR	95%CI	p-value
NADPH oxidase (rs4673)	C/C	28 (24.5)	88 (35.4)	1.34	0.6508	0.3137-1.3499	0.246
NADPH oxidase (rs4673)	C/T	45 (39.5)	122 (49.2)	1.14	0.6996	0.3629-1.3487	0.285
NADPH oxidase (rs4673)	T/T	41 (36.0)	38 (15.3)	7.39	2.7529	1.3066-5.8005	0.006
NOS3 (rs1799983)	G/G	48 (42.1)	144 (58.1)	3.65	0.5296	0.2749-1.0203	0.058
NOS3 (rs1799983)	G/T	41 (36.0)	87 (35.1)	0.11	1.1241	0.5718-2.2099	0.734
NOS3 (rs1799983)	T/T	25 (21.9)	17 (6.8)	5.97	3.0585	1.2094-7.7348	0.014
Protein p53 (rs1042522)	Arg/Arg	66 (57.9)	77 (31.0)	11.05	2.9720	1.9181-8.9283	0.008
Protein p53 (rs1042522)	Arg/Pro	35 (30.7)	107 (43.1)	2.20	1.1109	0.9032-1.1981	0.137
Protein p53 (rs1042522)	Pro/Pro	13 (11.4)	64 (25.8)	4.80	0.5101	0.1721-1.0187	0.028
GPX1 (rs1050450)	C/C	60 (52.6)	104 (42.0)	5.48	2.3459	2.0198-6.8163	0.019
GPX1 (rs1050450)	C/T	41 (35.9)	98 (39.5)	2.43	1.0128	0.8271-1.1921	0.118
GPX1 (rs1050450)	T/T	13 (11.4)	46 (18.5)	2.58	0.9981	0.8899-1.1029	0.107

Table 2. *The frequency of genotypes occurrence (n, %), odds ratios and confidence intervals of genotypes in development of ARCD.*
Notes. GPX1 - Glutathione Peroxidase 1; NADPH oxidase - nicotinamide adenine dinucleotide phosphate oxidase; NOS3 - Nitric Oxide Synthase 3.

Gene	Genotypes	n=54 With adverse outcomes	n=60 Without adverse outcomes	χ2	OR	95%CI	p-value
MMP-2 (rs243865)	C/C	38 (70.4)	29 (48.3)	4.81	4.761	2.313-21.543	0.029
MMP-2 (rs243865)	C/T	13 (24.7)	23 (38.3)	0.29	0.978	0.362-1.349	0.645
MMP-2 (rs243865)	T/T	3 (5.6)	8 (13.3)	0.43	0.121	0.007-1.815	0.052
MMP-9 (rs3918242)	C/C	34 (63.0)	16 (26.7)	11.9	15.23	4.275-31.020	<0.0001
MMP-9 (rs3918242)	C/T	18 (33.3)	32 (53.3)	4.41	1.121	0.572-2.213	0.737
MMP-9 (rs3918242)	T/T	2 (3.7)	12 (20.0)	0.04	0.312	0.209-2.541	0.001
HIF1α (rs1154946)	C/C	15 (38.5)	57 (76.0)	0.02	3.751	2.123-11.981	<0.001
HIF1α (rs1154946)	C/T	22 (56.4)	14 (18.7)	2.65	2.983	1.812-5.102	<0.001
HIF1α (rs1154946)	T/T	2 (5.1)	4 (5.3)	1.08	1.121	0.981-1.981	0.902

Table 3. *The frequency of genotypes occurrence (n, %), odds ratios and confidence intervals of genotypes in progression of ARCD.*
Notes. MMP - Matrix metalloproteinase; HIF1α - hypoxia-inducible factor 1, alpha subunit.

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[Abstract:0148]

MAT IN A CASE OF ABDOMINAL SEPSIS

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Clinical case of a 17-year-old-woman who came to the hospital because of 2 days feeling diarrhea and vomiting after eating in a fast-food chain. Admitted to the intensive care unit. Constants: BP 63/26 mmHg, HR 137 bpm, temperature 37.8ºC, Sat O_2 100% basal. Analytics: Hemogram: Hb 11.4 g/dl, leucocytes 24200 (23380 neutrophils)/ml, Plateles 102000/ml; INR 1.56; Creatinine 2.02 mg/dl. PCR 245, Procalcitonin 144. We started with continuous replacement therapy CVVHDF mode with Oxyris through femoral catheter for cytokine absorption and treatment with linezolid iv. Continuous infusions of dobutamine, vasopressin and norepinephrine were necessary to maintain constants.

Enterotoxic *E. coli*, Shiga toxin and O157 were isolated and treatment was extended with Meropenem + linezolid + hydrocortisone. Transthoracic ultrasound showed an LVEF of 30% and signs of heart failure. Plateletopenia in decline 31,000.

Restart replacement therapy CVVHDF + Oxyris mode at high flow dose. Interconsultation with Haematologist who performs smears (echinocytes) —> transfusion of 1 pool of platelets and initiation of plasmapheresis with plasma exchange with PFC. Suspension due to anaphylaxis. Start of support with NIMV BIPAP mode with subsequent isolation of the airway. Extravascular haemolytic anaemia (hapto N). Coomb -. Hb 10.2. Thrombopenia 44000, no bleeding. Coagulation: N. Two packed red blood cells were transfused. Waiting for lab results to assess the presence of anti-ADAMS 13 Ab and complement mutations CFH, MCP, CFI, THBD, CFB, C3.

If there is no improvement with plasmapheresis, treatment with Eculizumab will be considered, but not necessary. ADAMS 13: 66. No more plasmapheresis. Improvement and discharge.

Keywords: *mat, abdominal septic shock, plasmapheresis*

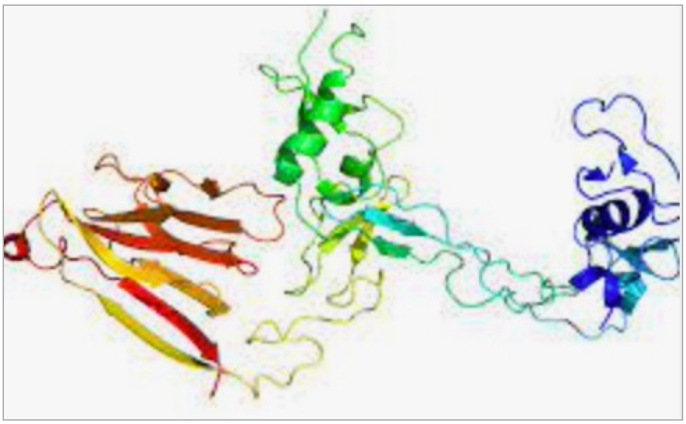

Figure 1. *Adams 13.*

[Abstract:0149]

AUTOLOGOUS STEM CELL TRANSPLANTATION(ASCT) ON MULTIPLE MYELOMA (MM) PATIENTS WITH EXTRAMEDULLARY PLASMACYTOMA (EMP)

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Objective: The aim of this study is comparing the effectiveness of aoutologous stem cell transplantation (ASCT) on multiple myeloma (MM) patients with extramedullary plasmacytoma (EMP) and also compare the two groups (MM with EMP and MM without EMP) according to progression free survival (PFS) and overall survival (OS).

Materials and Methods: Our study is a retrospective cross -sectional study. We retrospectively reviewed patients' laboratory, clinical finding at the diagnosis and treatment response before ASCT in Bilkent City Hospital between January 2008 and March 2023.

Results: A 100 of 350 patients diagnosed with MM who underwent ASCT during their follow-up was included in this study. Forty-three of 100 had MM with EMP; 57 of 100 had MM without EMP. Serum Kappa, serum Lambda and LDH levels at the diagnoses were higher in MM patients with EMP ($p<0,05$). In addition, a significant differences was found between serum Kappa, serum Lambda and LDH levels with mortality ($p<0.05$). ASCT had not significant effect on two groups (MM with EMP and MM without EMP) according to OS and PFS ($p>0,05$). MM with EMP subgroup was analysed separate. Significant differences was found on PFS according to response before ASCT (CR+VGPR/PR+PD; $p<0,05$), however, didn't find significant differences on OS (CR+VGPR/PR+PD; $p>0,05$).

Conclusions: So many factors could have an effect on OS, as like as comorbidity and infections in contrast to PFS. For this reason, PFS is more valuable marker than OS. Multiple Myeloma with EMP patients had better PFS, if started the transplantation process with CR or VGPR response.

Keywords: *multiple myeloma (MM), extramedullary plazmasitoma (EMP), autologus stem cell transplantation (ASCT)*

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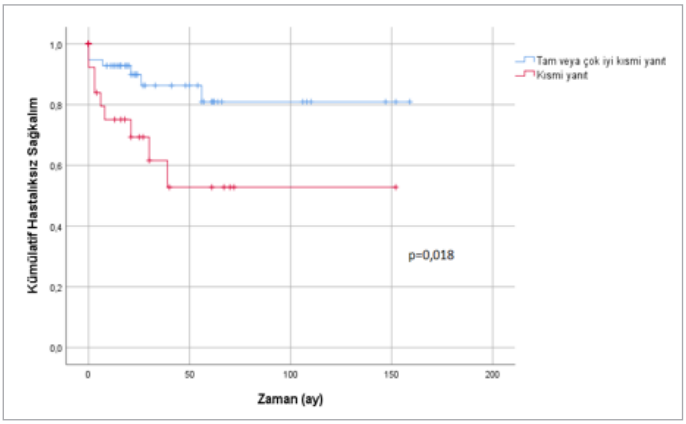

Figure 1. Comparison of Post-Transplant DFS of EMP Group According to Pre-Transplant Response Status Kaplan-Meier Curve.

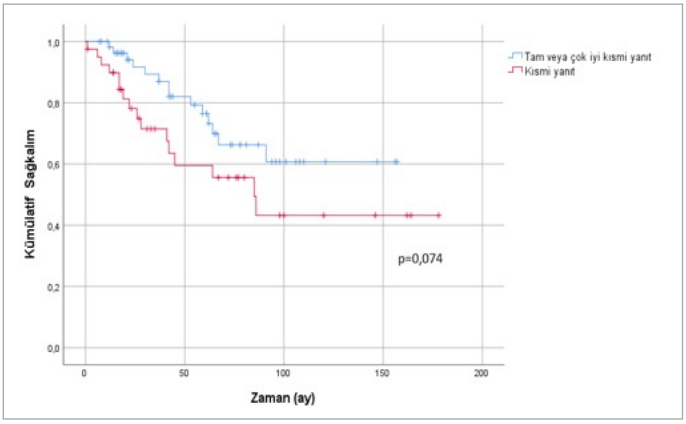

Figure 2. Comparison of Post-Transplant OS of EMP Group According to Pre-Transplant Response Status Kaplan-Meier Curve.

[Abstract:0160]

METAMIZOLE INDUCED NEUTROPENIA

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Introduction: Metamizole is a widely used analgesic and antipyretic drug with an increasing use due to population aging given its cardiovascular safety profile compared to NSAIDs. Metamizole-induced neutropenia (MIN), a serious adverse effect, has been widely described in patients from northern Europe leading to its prohibition in some countries. Nevertheless, it is not well defined if Mediterranean patients share these attributes. We aim to describe characteristics, management and prognosis of MIN occurred in our area.

Methods: Descriptive, observational, retrospective, two-centres study (November/2012-July/2023) including adult patients who developed MIN and required hospital admission.

Results: 24 cases of MIN were included. Median (Q1-Q3) age of 32 (23-57) years, predominantly female 59.1%. None of the patients was under immunosuppressive or cytostatic treatment. Granulocyte colony-stimulating (GCSF) factor was initiated in 66.7% of cases, with a median neutropenia recovery time of 3.5 (2-6) days compared to non-GCSF use in which the recovery time was 5 (2-9) days. Sepsis or septic shock was developed in 3 (12.5%) cases, all related with *Pseudomona Aeruginosa* infection, 2 of which associated bacteriaemia. However, only 42% of the cases included antipseudomonal empirical antibiotherapy. No deaths were registered.

Discussion: Immunosuppressive or cytostatic treatment and advanced age, previously described as risk factors were not present in our sample. Therefore, we consider that predisposing factor for MIN development should be further studied in Mediterranean population.

Finally, lack of awareness of the vital risk related to MIN is striking as >50% of the cases, no anti- *Pseudomona Aeruginosa* empirical antibiotic coverage was used.

Keywords: *metamizol, neutropenia, agranulocytosis*

Characteristics, n (%)		Value
Age (years)		32 (23 – 57)
Gender	Male Female	9 (40.9) 13 (59.1)
Charlson Index		0 (0 - 2.75)
Metamizole dose (mg)	≤ 575 575 -1150 ≥ 1150	1 (4.2) 2 (8.3) 21 (87.5)
Immunosuppressive or cytostatic treatment		0
Administration route	Oral Intravenous	23 (95.8) 1 (4.2)
Initiation metamizole – minimum neutropenia		7 (2.75 – 11.25)
Neutropenia degree (cc/mm^3)	1000 – 1500 500 – 1000 < 500	0 (0) 1 (4.2%) 23 (95.8)
Symptomatology	ear – nose - throat respiratory digestive genitourinary	14 (58.3) 4 (16.7) 3 (12.5) 3 (12.5)
Empirical antibiotherapy	3-G-cefalosporine* piperacillin/ tazobactam levofloxacin aztreonam	8 (33.3) 9 (37.5) 1 (4.2) 1 (4.2)
Microbiological isolation	*P. aeruginosa* bacteriaemia *E. coli* bacteriaemia *S. pneumoniae* bacteriaemia SARS-CoV-2 Influenza A virus	3 1 1 1 1
Medical treatment	G-CSF corticosteroids	16 (66.7) 3 (12.5)
Septic shock		3 (12.5)
Associated Cytopenias	Anaemia Thrombocytopenia	11 (45.8) 3 (12.5)
Recovery time with GCSF (days)		3.5 (2 – 6)
Recovery without GCSF (days)		5 (2 – 10)

Table 1. Metamizol induced neutropenia in our area.
**GCSF: Granulocyte colony-stimulating factor. *3-G-Cefalosporine: not included Ceftazidime.*

[Abstract:0165]

CARCINOID HEART DISEASE: WHEN TO SUSPECT

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Case Description: A 67-year-old man consulted for dyspnoeic sensation and lower limbs oedema. In addition, he referred up to ten daily liquid stools without pathological products together

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with weight loss. On examination, he presented bibasal crackles, hepatomegaly with ascites, hepatojugular reflux and bilateral malleolar oedema. Urgent laboratory tests showed elevated cytolysis and cholestasis enzymes, hypokalaemia metabolic alkalosis and elevated atrial natriuretic peptide.

Diagnostic Pathways: Considering the simultaneous appearance of acute heart failure and diarrheal syndrome we approached the study as a single clinical entity. Autoimmunity markers, hepatotropic viruses and iron overload were discarded. Multiphase computed tomography showed countless, hypodense and millimetric nodular lesions in the entire liver parenchyma. Finally, echocardiography showed right atrium dilatation, depressed right ventricle systolic function and moderate insufficiency and fibrosis of tricuspid valve. Given the previous findings compatible with diffuse infiltrative liver disease with endomyocardial involvement, we considered the differential diagnosis between deposit and granulomatous diseases such as amyloidosis or sarcoidosis; neoplastic infiltration or multinodular hepatocellular carcinoma; infectious in relation to hepatic microabscesses, and connective tissue diseases. A hepatic biopsy was performed finding hepatic tissue infiltrated by scarcely differentiated cells with expression of synaptophysin and chromogranin A compatible with neuroendocrine carcinoma.

Discussion: Primary hepatic carcinoid tumour is an extremely rare neoplasm. Initial presentation as acute right-sided heart failure secondary to carcinoid heart disease (CHD) is exceptional and should be suspected in the presence of right ventricular endocardial valves fibrosis, even more when accompanied of systemic symptoms derived from serotonin release such as diarrhoea or facial flushing.

Keywords: *carcinoid, CHD, serotonin*

[Abstract:0167]

PROGRESSIVE DYSPNEA DUE TO TWO SIMULTANEOUS PATHOLOGIES: ACTINOMYCOSIS AND NON-HODGKIN LYMPHOMA

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Aim: A 56-year-old woman with a history of hypothyroidism and hypertension presented with dyspnoea and bilateral neck swelling that was identified as multiple enlarged, firm lymph nodes and fluctuating swelling. Further evaluation of the neck revealed an abscess and lymphoma both of which were about to cause the airway collapse. This workup describes a state of progressive dyspnoea due to two simultaneous pathologies: Actinomycosis abscess and Non-Hodgkin lymphoma.

Methods: Possible infectious and malign processes were gone over with biochemical tests, radiological and pathological methods.

Findings: Biochemical evaluation was normal except a minimally increased erythrocyte sedimentation rate. Neck Ultrasound showed fluid collection and lymphadenitis with reactive lymph nodes. Computed tomography revealed conglomerated enlarged lymph nodes with necrotic centres. Pathological evaluation of a neck biopsy was concluded as High Grade B Cell Lymphoma and culture of another sample demonstrated Actinomyces colonies.

Results: After starting antibiotics for the mycetoma and conventional chemotherapy for the lymphoma, neck swellings regressed prominently, and the airway relaxed noticeably, keeping the patient away from a tracheotomy.

There can be many causes of progressive dyspnoea, and once in a while two different pathologies, needing different types of treatments, may simultaneously narrow the airway. This case describes a case with different simultaneous diseases that could cause an airway collapse and acute respiratory failure if not diagnosed and treated on time.

Keywords: *actinomyces, lymphoma, dyspnoea*

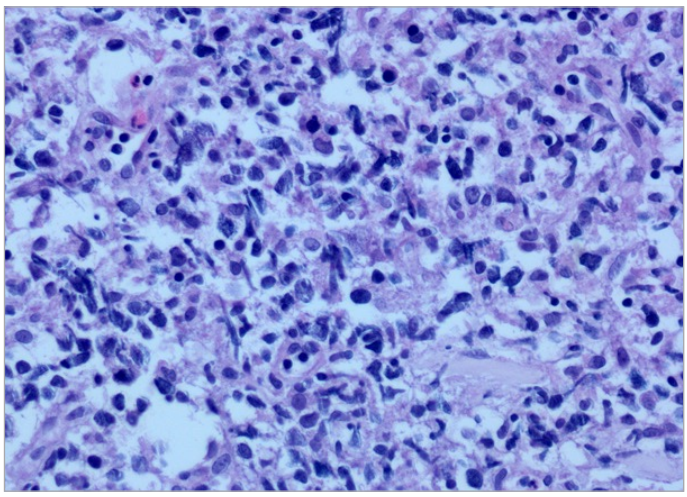

Figure 1. *Right sided cervical lymph node tru-cut biopsy-Diffuse Large B-cell Lymphoma.*

Diffuse lymphocytic proliferation that is infiltrating the surrounding muscle tissue was seen. The cells had eosinophilic nuclei with irregular boundaries and open chromatin regions with eosinophilic cytoplasm. According to the immunohistochemical workup, the cells were Bcl-2 and CD20 diffusely and MUM-1, Bcl-6 focally positive. Ki-67 proliferation index was up to 70%. Chromogenic in situ hybridization showed EBER negativity. It was concluded as High Grade B Cell Lymphoma, compatible with Diffuse Large B Cell Lymphoma.

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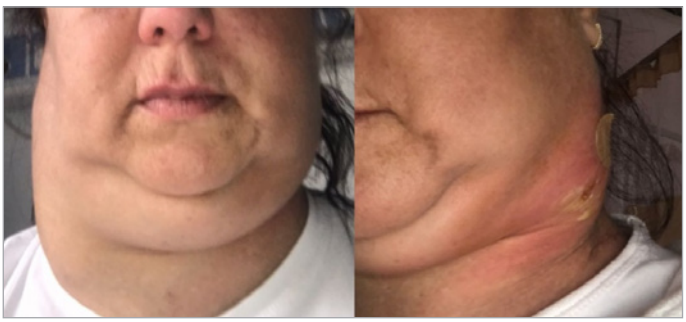

Figure 2. Bilaterally swollen neck and left-sided abscess in admission. Prominently enlarged neck; the left side was fluctuating with multiple enlarged lymph nodes, the biggest of which had a diameter of 3 cm in length while in the right side, there were numerous enlarged, firm lymph nodes several centimeters wide. Distinctive stridor throughout the inspiration.

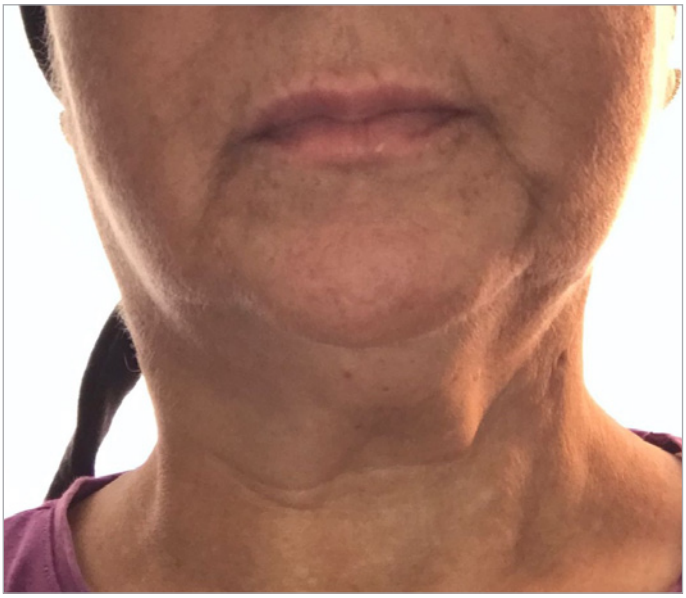

Figure 3. Neck after iv penicillin and R-CHOP treatments. Neck's response after treatment. Intravenous Benzylpenicillin 4x4 million IU was started because of the Actinomyces abscess. 21 days of R-CHOP (Rituximab, Cyclophosphamide, Doxorubicin, Vincristine, Prednisone) chemotherapy was given due to Non-Hodgkin Lymphoma.

[Abstract:0169]

PERSISTENT MELENA DUE TO GASTRIC PLASMACYTOMA, IN A PATIENT WITH MULTIPLE MYELOMA

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Aim: A 76-year-old man with a history of multiple myeloma, coronary artery disease, benign prostate hyperplasia, hypertension, type 2 diabetes mellitus and a ten-day-use of nonsteroidal anti-inflammatory drugs presented with recurrent melena that was identified as gastric plasmacytoma, an extramedullary manifestation of multiple myeloma. His bleedings regressed after the initiation of chemoradiotherapy. This workup describes a state of persistent melena due to plasmacytoma, which was put an end by chemoradiotherapy.

Methods: Possible causes of gastrointestinal bleeding were gone over with biochemical tests, radiological and pathological methods.

Findings: Biochemical evaluation revealed pancytopenia and an endoscopic examination demonstrated the gastric lesions from which biopsies were taken. Also, PET-CT examination revealed the disseminated disease and gastric involvement. Gastric biopsies resulted as plasmacytoma and after recurrent haemostatic attempts, chemoradiotherapy became the ultimate solution that ended the bleedings.

Results: After starting chemoradiotherapy for the gastric plasmacytoma, melena and transfusion needs prominently regressed, keeping the patient away from a hypovolemic shock. Conventional chemotherapy and concomitant radiotherapy can be the solution in some gastrointestinal bleedings that's why detailed search for the cause and being open-minded to different treatment possibilities is important.

Keywords: melena, plasmacytoma, myeloma

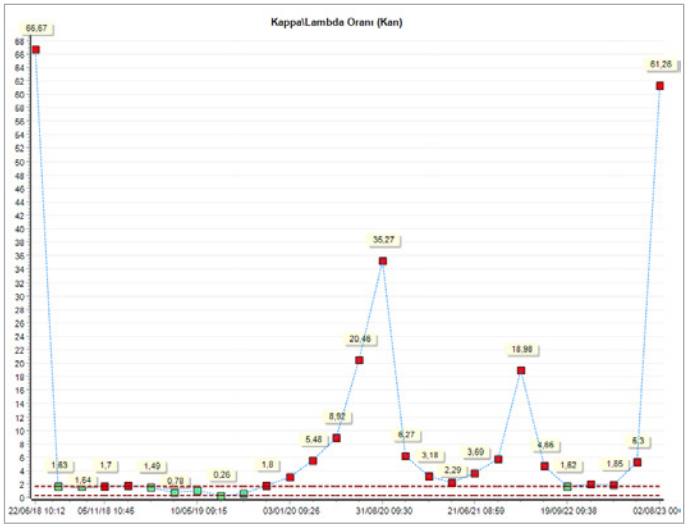

Figure 1. Kappa light chain graph during the course of multiple myeloma. He had been diagnosed with Multiple Myeloma (MM) five years before his current admission. He was firstly given ten cures of Bortezomib-Dexamethasone and Zoledronate chemotherapy which provided the remission. Two relapses were occured during his out-patient follow-up. Kappa light chain increment was seen in both of the relapses.

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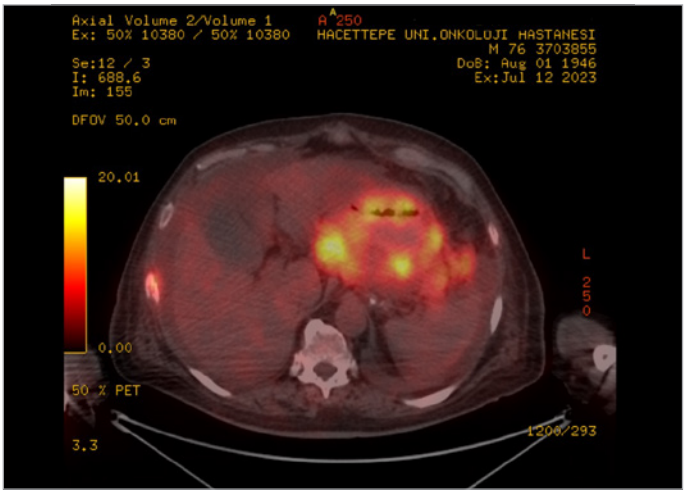

Figure 2. *PET-CT imaging of gastric plasmacytoma.*
In search of any cause of gastrointestinal bleeding, an endoscopic examiation, which demonstrated the gastric wall irregularity, was done. A PET-CT imaging demonstrated the gastric plasmacytoma suspicion which was proved by the gastric biopsy afterwards. Monotypical plasma cell infiltration was seen. The cells were Kappa and c-myc positive while Cyclin D1, Lambda and Cam 5.2 negative.

[Abstract:0173]

REVERSIBLE HYPOCHOLESTEROLEMIA WITH CHRONIC DIARRHEA: WHAT YOU CAN FIND WHEN PANDORA'S BOX IS OPEN, A CASE REPORT

Giuseppe Linsalata[1], Francesco Finizola[3], Simone Barsotti[1], Giacomo Bini[2], Claudia Cois[1], Carlotta Giani[1], Emanuele Citi[1], Filippo Masi[1], Riccardo Capecchi[1], Javier Rosada[1]

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Introduction: hypocholesterolaemia is sometimes associated with cancer. One of underlying mechanisms is related to over expression of LDL receptors in tumoural cells.
Case Presentation: A 38-y-old man, was hospitalized to our unit for chronic diarrhoea from 6 weeks without fever. Blood exams showed WBC 19300/mm^3, haemoglobin 12.8 g/dl, MCV 80 fl, creatinine 0.85 mg/dl, no alteration of liver enzymes and protein synthesis, CRP 250 mg/l, ESR 95 mm/h. Lipid profile showed total cholesterol 90 mg/dl, HDL 18 mg/dl, LDL 46 mg/dl, triglycerides 100 mg/dl. Diagnostic work out assessed: EGDS and colonoscopy (without alterations), HIV test (negative), calprotectin (90 microg/g), PCR on faeces swab (negative for viruses, bacteria, and *C. difficilis* toxin), test for celiac disease (negative). Abdominal ultrasound showed multiple lymph nodes with malignant features. PET CT showed pathological lymph nodes suggestive for 3rd Ann-Arbor stage lymphoma. Histological exam diagnosed a Hodgkin Lymphoma. After two weeks from diagnosis, the patient started therapy with ABVD scheme. After first injection diarrhoea was resolved. After 10 days, lipid profile was in range (total cholesterol 184 mg/dl, HDL 58 mg/dl, LDL 99 mg/dl, triglycerides 136 mg/dl).
Conclusions: Chronic diarrhoea and hypocholesterolaemia are two non-specific clinical findings. Their association wasn't described before in Hodgkin lymphoma onset. The mechanisms are unclear. Fast resolution after first chemotherapy injection suggests the role of over expression of LDL receptors and malabsorption due to lymphatic obstruction of abdominal masses.

Keywords: *Hodgkin lymphoma, chronic diarrhoea, hypocholesterolaemia*

[Abstract:0179]

PREVALENCE OF DIABETES IN PATIENTS DIAGNOSED WITH COLORECTAL CANCER AND THE EFFECT OF USED ANTIDIABETIC AGENTS ON SURVIVAL AND RECURRENCE

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Background: Colorectal cancer is the 3rd most common type of cancer in men and women in Turkey, according to GLOBOCAN 2020 data. Although it is known that diabetes is a risk factor for colorectal cancer, we plan to conduct research on how it affects prognosis and how the antidiabetic agents used affect prognosis.
Methods: The data of adult patients, who were diagnosed with colorectal cancer in 2016-2018 and evaluated by Ankara City Hospital Oncology Clinic, were retrospectively examined. We used SPSS 26.0 Inc (IL, USA) program for statistical analysis.
Results: 362 patients were included in the study. The average age at diagnosis is 60.3, 67.7% of whom are men. The number of diabetic patients was 119 (32.9%). The diagnosis stage of the patient was the most important factor affecting survival and recurrence development. The presence of diabetes had a positive effect on 5-year survival (p=0.045). Metformin use had a positive effect on 5-year survival in patients diagnosed with diabetes (p=0.01). In patients diagnosed with diabetes, DPP-4 inhibitors had a positive effect on survival, although it was not statistically significant (p=0.07). 5-year survival was observed in all 17 patients using SGLT-2 inhibitors. Insulin use had negative effects on survival (p=0.06).
Conclusions: Diabetes is a risk factor for colorectal cancers. In our study, the presence of diabetes had a positive effect on 5-year survival in colorectal cancer patients. Metformin has a positive effect on survival. In the study, DPP4-inhibitors and SGLT-2 inhibitors, which were mostly used in combination with metformin, potentially had a positive effect on survival. Insulin use negatively affects survival.

Keywords: *colorectal cancer, recurrence, survival, diabetes mellitus, antidiabetic agents*

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[Abstract:0206]

CANCER BEHIND BARS: THE CHALLENGE OF OPTIMIZING STRATEGIES FOR THE DIAGNOSIS AND TREATMENT OF CANCER PATIENTS IN THE PENITENTIARY HOSPITALIZATION UNIT

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Background: Diagnosis of cancer in prison is a challenge due to the difficulties and characteristics of the patients. Under continuous surveillance, it would be expected an earlier diagnosis and better survival than outside prison.

Methods: Retrospective descriptive cohort study, comparing cancer patients diagnosed the last 15 years in a Prison Hospitalization Unit (PHU) managed by Internal Medicine with cancer patients in follow-up at a community-based hospital. Collecting data from comorbidities; tumour type; tumour stage; treatment; 5-year survival with 2:1 patient matching. The study was approved by the Clinical Research Ethics Committee. The level of statistical significance was 5%.

Results: Of the 131 prison patients, data showed 16 (21.6%) gastrointestinal, 13 (17.6%) head and neck (H&N), 13 (17.6%) prostate, and 9 (12.2%) lung cancer. Statistically significant differences($p<0.01$) were found in the cause of diagnostic admission in prison group, with incidental diagnosis and presence of toxic syndrome being higher than outside prison. The mean age of exitus was 62 (SD:11)

Regarding tumour size, no significant differences were found between groups, but significant differences were found in lymphatic involvement ($p=0.004$) and metastasis($p=0.006$). Nodal involvement was 62.2% (46) in PHU and 47.9% (67) in the control group; and metastasis in 35.1% (26) in PHU and 22.9% (32) in controls.

Survival analyses showed a higher survival rate for lung cancer in prison, an inferior survival for H&N patients inside prison and no differences for GI tumours were seen.

Conclusions: Despite being more closely monitored, cancer patients in prison are diagnosed in more advanced stages. However, survival is greater than non-prison patients in some type of tumours.

Keywords: *prison, cancer, survival*

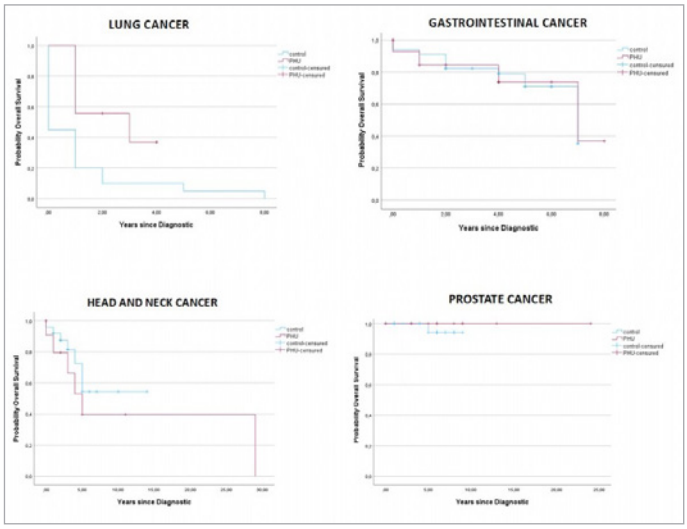

Figure 1. *Log-rank survival curves for the most prevalent tumour in prison.*

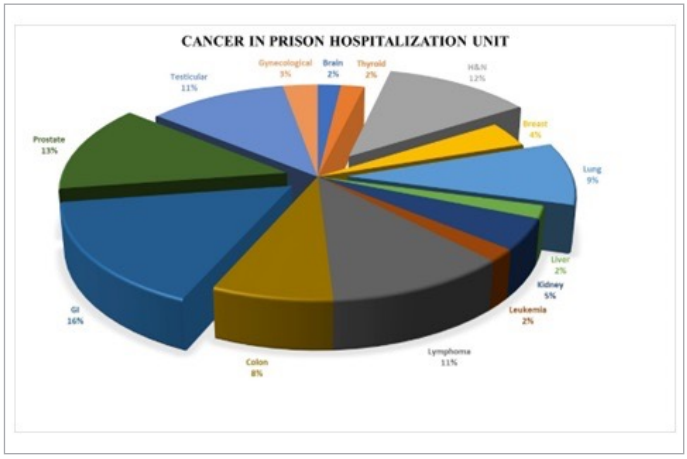

Figure 2. *Pie chart of tumours in prison.*

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		PHU N(%)	Control N(%)	p-value
	Age	57(13)	59(13)	NS
	Smoker	57(77)	84(59.6)	<0.001
	Enolism	41(55.4)	53(37.6)	<0.001
	Other Toxics	29(39.2)	17(12.1)	<0.001
Tumor Size	Gastrointestinal	5.8(2.4)	5.8(4.2)	NS
	Oropharynx	3,8(1.6)	3.8(2.5)	NS
	Prostate	6(2.4)	1.5(0.7)	0.033
	Lung	5.8(2.4)	5.8(4.2)	NS
Node	Gastrointestinal	10(29.4)	10(62.5)	0.034
	Oropharynx	11(84.6)	18(69.2)	0.016
	Prostate	3(23.1)	2(7.7)	NS
	Lung	9(100)	20(100)	NS
Metastasis	Gastrointestinal	5(31.3)	7(20.6)	NS
	Oropharynx	5(38.5)	5(19.2)	0.034
	Prostate	3(23.1)	1(3.8)	NS
	Lung	7(77.8)	15(75)	NS
Surgery	Gastrointestinal	14(87.5)	32(94.1)	NS
	Oropharynx	7(53.8)	17(65.4)	NS
	Prostate	10(76.9)	22(84.6)	NS
	Lung	2(22.2)	1(5)	NS
Chemotherapy	Gastrointestinal	9(56.3)	11(32.4)	NS
	Oropharynx	8(61.5)	22(84.6)	NS
	Prostate	3(23.1)	1(3.8)	NS
	Lung	7(77.8)	15(75)	NS
Radiotherapy	Gastrointestinal	3(18.8)	2(5.9)	NS
	Oropharynx	9(69.2)	20(76.9)	NS
	Prostate	7(53.8)	8(30.8)	NS
	Lung	4(44.4)	6(30)	NS
Biologics Treatment	Gastrointestinal	0(0)	4(11.8)	NS
	Oropharynx	2(15.4)	8(30.8)	NS
	Prostate	1(7.7)	0(0)	NS
	Lung	4(44.4)	7(35)	NS
Exitus	Gastrointestinal	4(26.7)	11(32.4)	NS
	Oropharynx	7(53.8)	7(28)	NS
	Prostate	0(0)	1(4)	NS
	Lung	5(55.6)	20(100)	0.005

Table 1. *Graphical summary of the stage, treatment and mortality of the most prevalent tumours in prison.*

[Abstract:0266]

CRYPTOGENIC STROKE IN A PATIENT WITH GASTRIC ADENOCARCINOMA

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A 66-year-old woman, with history of gastric signet-ring-cell adenocarcinoma, who underwent surgery and platinum-based chemotherapy four months ago, presented to the Emergency department with garbled speech and paresis of her left hand. Physical examination revealed dysarthria, claudication of the left upper limb, and hemiasomatognosia.

A CT angiography was performed, diagnosing acute-subacute stroke with subdural collections in both hemispheres. ECG and chest x-ray did not show anomalies. Doppler-echography study of the supra-aortic trunks and transthoracic echocardiography were normal. Blood cultures were negative, and laboratory findings revealed haemolytic anaemia and thrombocytopenia (haemoglobin 8 g/dl, platelets 20x10^3/µL, LDH 677 U/l, total bilirubin 2 mg/dl). Coombs test was negative and peripheral blood smear showed schistocytes. These findings led to the diagnosis of thrombotic microangiopathy (TMA). Due to neurological involvement, thrombotic thrombopenic purpura (TTP) was regarded as the most probable diagnosis. However, a normal ADAMS13 activity was incompatible with TTP. Given the patient's recent past history of gastric adenocarcinoma, it was suspected that TMA was secondary to neoplasm recurrence. Due to clinical worsening, support measures were withdrawn, and the patient passed away two days later.

Cancer can cause TMA by endothelial damage, and production of metastases that generate microvascular obstructions, fragmenting red blood cells, consuming platelets and causing organ dysfunction. TMA can also be triggered by infections and anticancer drugs. We report this case because it is important to consider this diagnosis in patients with solid tumours who develop anaemia and thrombocytopenia, especially if they refer to neurologic symptoms.

Keywords: *crytogenic-stoke, gastric-adenocarcinoma, thrombotic-microangiopathy*

[Abstract:0281]

AN UNEXPECTED AND CHALLENGING DIAGNOSTIC CAUSE OF ANAEMIA: CASE REPORT

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Military Hospital, Galati, Romania

Summary: Castleman disease is a rare group of lymphoproliferative disorders of unknown aetiology. This disease affects lymph nodes of anybody region and can be classified into two distinct disorders: the more common unicentric Castleman disease and multicentric associated or not with HHV-8 Castleman disease.

Case Presentation: A 71-year-old woman hypertensive and diabetic with a history of many hospitalizations, receiving blood transfusions for worsening anaemia symptoms in the last 9 months. She presents with generalized physical weakness, weight loss, no appetite and intermittent diarrhoea. Clinically, the patient is afebrile with pale skin; neck and axillar enlarged lymph nodes; polypneic, hypotensive and tachycardic. Her abdomen is soft, but tender in right flank. No diarrhoea at presentation. The neurologic examination is non-focal. Lab findings revealed moderate anaemia, high inflammatory markers, renal disfunction, dyselectrolytemia, slight hypoalbuminemia and high total proteins.

An axilalar ganglion biopsy showed histologic features correspond to the hyaline-vascular type of Castleman disease. Immunohistochemistry: features of multicentric Castleman disease associated with HHV8 (KSHV/HHV8- MCD).

The patient received blood transfusion, albumin, correction of

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dyselectrolytemia, and once the diagnostic was made she was transferred to the haematology clinic where despite the intensive treatment, the evolution was unfavourable.

Conclusions: The diagnostic of Castleman disease must be distinguish from other disorders such as IgG4-RD, malignant lymphoma, reactive hyperplasia of various lymph nodes, advanced HIV and rheumatic diseases.

Keywords: case report, Castleman disease, histologic features

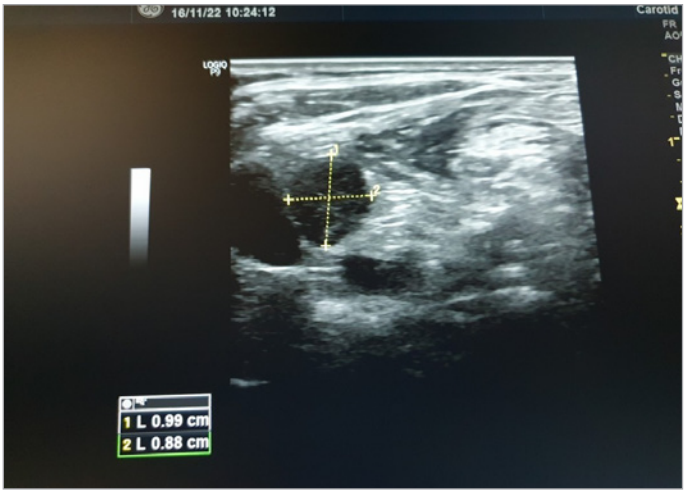

Figure 1. *Neck enlarged lymph node on ultrasound.*

[Abstract:0293]

HEMOPHAGOCYTIC SYNDROME, EXPERIENCE IN AN INTERNAL MEDICINE DEPARTMENT

Iván Fernández Castro, Lucía Gómez Suárez, Maria Del Mar Arcos Mosquera, Rocío Prado Álvarez, Diego Rodríguez Fiuza, Martín Naya Rosato, Clara Casar Cocheteux, Adela Lama López, Miguel Franco Álvarez, Mariño Fernández Cambeiro, Rosario Alende Sixto, Jose Antonio Díaz Peromingo

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Objective: Hemophagocytic syndrome (HPS) is a rare but potentially life-threatening complication caused by excessive and uncontrolled activation of the immune system. It can result from various causes such as genetic disorders, autoinflammatory diseases, viral infections, or cancer.

Methods: Descriptive analysis of HPS cases diagnosed in an Internal Medicine (IM) department of a terthiary hospital, which includes haematology and paediatrics services, between 2013 and 2023.

Results: In the last ten years, 12 cases of HPS were diagnosed in our hospital, with 4 occurring in the IM department. The median age was 32 years with an interquartile range (IQR) of 14. The median time to diagnosis was 5.5 days, IQR 3.25. Diagnostic manifestations present in all cases included fever, elevation of ferritin (median 7366 ng/mL, IQR: 7942 ng/mL), visualization of hemophagocytosis forms in bone marrow stain, and elevated CD25. Cytomegalovirus and T-cell lymphoma triggered two of the cases. In the other two, etiological diagnosis was not reached after thorough examination. All patients received treatment with corticosteroids, and 3 of them with etoposide. There was one fatality, and none of the other cases experienced a relapse.

Conclusions: Although the prevalence of HPS is higher during the paediatric age, this syndrome can occur at any age. This case series highlights the need of keeping in mind this diagnosis in our daily practice. In the appropriate clinical context of fever, a markedly elevated ferritin, or cytopenias should raise our alarms for early diagnosis and treatment, crucial for ensuring a favourable outcome.

Keywords: hemophagocytic syndrome, internal medicine, ferritin

[Abstract:0313]

MULTILINE SEQUENTIAL CHEMOTHERAPY IN PRIMARY OVARIAN LEIOMYOSARCOMA: A COMPREHENSIVE CASE REPORT

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Summary: Primary ovarian leiomyosarcomas (POLMS) are exceptionally rare, constituting less than 0.1% of all ovarian malignancies, thereby contributing to the ongoing controversy in their management. This case report presents the sequentially treated journey of a patient.

Purpose: Primary ovarian leiomyosarcoma (POLMS) is a rare and aggressive malignancy associated with poor survival rates. This case report shares the experience of a low-grade POLMS patient with extended overall survival managed through multilineage chemotherapy. Our objective is to provide insights into the optimal management of this uncommon and intricate disease, contributing to existing knowledge and emphasizing the importance of a personalized treatment approach.

Methods: A 48-year-old woman presented with right lower abdominal quadrant pain and diarrhoea. Diagnostic studies confirmed POLMS post right salpingo-oophorectomy. During the postoperative period, a metastatic hepatic mass emerged, prompting chemotherapy. The patient underwent five different treatment regimens, with eight agents considered. Tissue samples underwent examination for oestrogen receptor (ER) and progesterone receptor (PR) levels, alongside NTRK (Neurotrophic tyrosine receptor kinase) gene fusion positivity evaluation.

Findings: Initiating with the Gemcitabine and Docetaxel regimen, Pazopanib was introduced due to progression. Shifting to ifosfamide plus Doxorubicin plus MESNA (IMA) followed. Trabectedin, considered for progressive disease, was excluded

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due to reimbursement issues, leading to eribulin usage. Despite three cycles of eribulin treatment, new lung metastasis emerged. Prioritizing the patient's well-being, temozolomide treatment commenced.

Conclusions: Deciphering the appropriate treatment for rare malignancies is intricate. Individual consideration is pivotal to select the optimal option, bridging the gap from bench to bedside and ensuring patient-centric care.

Keywords: rare cancers, multi-line chemotherapy, primary ovarian leiomyosarcoma, sequential chemotheraphy

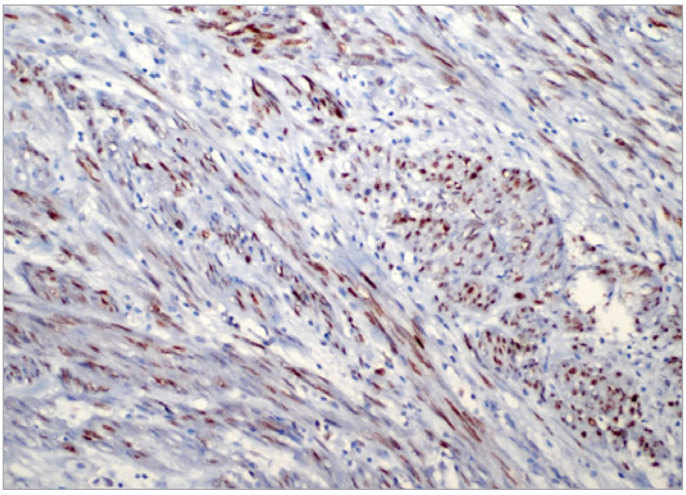

Figure 1a. *The cells within the tumour tissue was stained as ER positive.*

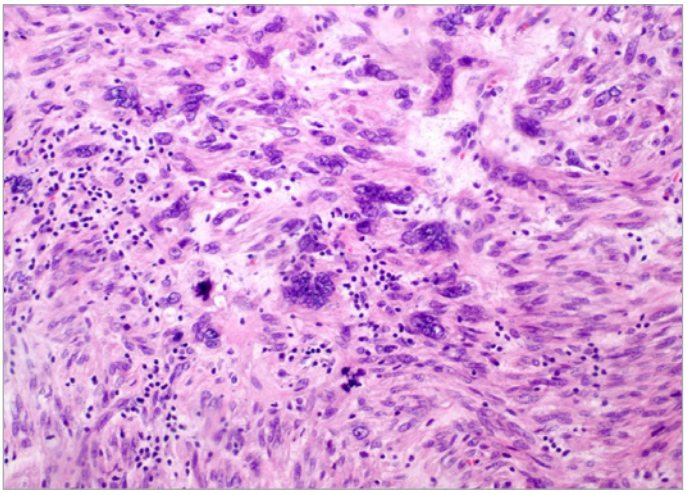

Figure 1b. *Example of apoptosis and high nuclear atypia from the trucut sample.*

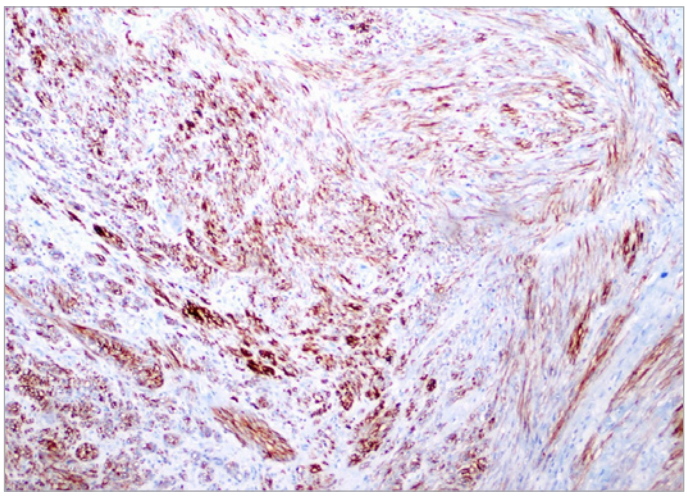

Figure 1c. *Desmin positivity recorded on immunohistochemical staining.*

[Abstract:0321]

RASH AND MULTIPLE ADENOPATHIES: A CASE REPORT

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Case Presentation: A 53-year-old woman with a personal history of atypical pneumonia due to Chlamydia pneumoniae with serositis and generalised lymphadenopathy, mild hepatitis and rash on the upper and lower limbs and trunk. Associated with the infectious process, she presented with polyadenopathic syndrome and autoimmune haemolytic anaemia.

She came to the emergency department with lumbar pain predominantly on the right, fever, abdominal distension, evanescent salmon-coloured skin rash and cervical lymphadenopathy.

Examination revealed submandibular, laterocervical, axillary and inguinal lymphadenopathies that were painful on palpation, the rest being normal.

During admission, blood tests were requested with findings of leucocytosis, elevated LDH, CRP 52.8 mg/L, positive serology for Chlamydia pneumoniae. A proteinogram was requested with findings of polyclonal hypergammaglobulinemia and hypoalbuminaemia, elevated beta-2-microglobulin, positive direct coombs. Further imaging studies were performed with a CT scan of the chest and abdomen showing findings compatible with a lymphoproliferative process, and a biopsy of the inguinal lymph node region was requested, compatible with angioimmunoblastic T-cell lymphoma.

Discussion: A differential diagnosis was considered with chlamydia pneumoniae infection with extrapulmonary manifestations; adult Still's disease (against non-elevated ferritin and not so high fever); or SLE-type autoimmune disease (against ANA negativity, no renal involvement) or lymphoproliferative syndrome.

Angioimmunoblastic T-lymphoma belongs to the group of

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peripheral T-lymphomas, which constitute less than 15% of NHL. Its most frequent clinical manifestations are generalised lymphadenopathy, hepatosplenomegaly, B symptoms, rash. Laboratory findings include elevated LDH and ESR, polyclonal hypergammaglobulinaemia, elevated beta-2-microglobulin, pancytopenia and hypoalbuminaemia, as was the case in our patient.

Keywords: *lymphadenopathy, rash, hypergammaglobulinemia*

[Abstract:0335]

HEPATOSPLENIC T-CELL LYMPHOMA WITH HEMOPHAGOCYTIC LYMPHOHISTIOCYTOSIS, REVEALED BY FEVER OF UNKNOWN ORIGIN

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The unusual peripheral lymphoma known as hepatosplenic T-cell lymphoma (HSTCL) is a rare hematologic cancer. In this report, we discuss a case of HSTCL with hemophagocytic lymphohistiocytosis that was discovered due to a prolonged fever in a 27-year-old woman with no prior medical history. Infectious and autoimmune diseases were ruled out during the etiological review. Histopathological analysis of the bone marrow revealed hemophagocytosis. A diagnostic splenectomy was performed after the patient's clinical condition worsened, showing no response to corticosteroids, and notable splenomegaly and hepatomegaly were observed on the positron emission tomography (PET) scan. The diagnosis of HSTCL was confirmed through pathological examination of the surgical specimens. In addition, a complementary genetic analysis revealed a gamma-delta T-cell lymphoma. Hemophagocytic lymphohistiocytosis remains a diagnostic and therapeutic challenge, and physicians should always consider the possibility of an underlying hematologic disorder. Our case highlights the difficulties in diagnosing HSTCL due to the various possible causes of prolonged fever of unknown origin, as well as the nonspecific clinical presentation and the absence of peripheral lymphadenopathy. Our report discusses a new case of HSTCL associated with hemophagocytic lymphohistiocytosis to raise awareness among physicians about this rare entity. This association can be confusing and may lead to delays in diagnosis and thus worsening prognosis.

Keywords: *hepatosplenic T lymphoma gamma delta, biological molecular, karyotype*

markers	value	markers	value	markers	value
haemoglobin	9.1 g/dl	Alanine aminotransferase	185UI/L	C reactive protein	39
White blood cell	3.7 × 10^9 /L	Aspartate aminotransferase	225U/l	Ferritin	580ng/ml
platelets	106 × 10/L	Gamma Glutamyl transferase	133 U/L	Triglycerid	3.5g/l
reticulocytes	45%	Alkaline phosphatase	227U/l	Fibrinogen	1.8mg/dl
lactate dehydrogenase	815 U/L	total bilirubin	3.6mg/dl		

Table 1. *Result of the biological workup.*

[Abstract:0339]

SPLENIC ZONE LYMPHOMA PRESENTED WITH ACQUIRED ANGIOEDEMA

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A 62-year-old female patient presented with complaints of intermittent swelling of the eyelids and upper lip, weakness, and 10 kg weight loss in the last year. On physical examination, upper lip angioedema and splenomegaly were detected. Normocytic anaemia (haemoglobin: 11.5 g/dl) and elevated acute phase reactant (C-reactive protein: 16 mg/L) were detected. Urticaria and pruritus were not observed. Bradykinin-mediated angioedema work-up, complement levels and C1 esterase, was sent. C4: 1.2 (10-40), C1 esterase inhibitor: 10.2 (21-38), and C1 esterase inhibitor function: 46.7% (70-132) were detected, while C1q was found to be normal. SERPING1 hereditary angioedema mutation was found to be negative. The patient was diagnosed with acquired angioedema. Bradykinin receptor antagonist, icatibant, and c1-esterase inhibitor treatments were planned to be given to the patient under emergency conditions. Acquired angioedema may present as paraneoplastic phenomenon. Mammography, gynaecological examination, and endoscopic examinations were performed. No signs of malignancy were detected. To evaluate a potential underlying malignancy, a whole-body FDG-PET/CT was performed. A diffusely mild hypermetabolic appearance in the spleen parenchyma, at the same level as the liver, and a diffusely mild hypermetabolic appearance in the bone marrow in the skeletal system were detected. Bone marrow biopsy performed and was found to be compatible with splenic marginal zone lymphoma. Treatment was started by the R-CHOP protocol. An improvement was detected in the patient's laboratory and clinical findings. An outpatient clinic check-up was planned.

Keywords: *paraneoplastic syndromes, angioedema, splenomegaly*

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[Abstract:0353]

INVESTIGATION OF THE EFFECTS AND SIDE EFFECTS OF CDK4/6 INHIBITORS ON SURVIVAL IN METASTATIC BREAST CANCER PATIENTS

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Purpose: To reveal new treatment options for metastatic breast cancer treatments. The aim of this study is to include CDK 4/6 inhibitor degradation efficiency and safety profile, in addition to studies conducted with aramotases in cases of hormone receptor-positive metastatic breast cancer.

Methods: Cases with hormone receptor-positive metastatic breast cancer using CDK 4/6 inhibitor, which is a third-line reference-oriented referral, were studied cross-sectionally. The aromatase inhibitors (fluvestrant/letrozole) and CDK 4/6 inhibitors (ribociclib/palbociclib) treatments of these patients were evaluated according to their recovery status, metastasis sites, and hormone receptor positivity. They were compared in terms of progression-free survival and overall survival, as well as development of drug side effects.

Results: 80 patients who were treated between 01.01.2017-31.12.2021 were included. While progression-free survival (PFS) and overall survival (OS) were similar among the CDK 4/6 studies in the group receiving fulvestrant, the patient group using ribociclib together with letrozole had an average progression-free survival of 32.5 months, and the patient group using palbociclib had an average progression-free survival of 16.9 months (p: 0.001). The average survival time of the patient group using ribociclib together with letrozole was 34 months, and the average survival time of the patient group using palbociclib was 17.2 months (p:0.001). The most common side effect was grade 2-3 neutropenia (85.8%).

Conclusions: Treatment of patients with metastatic hormone-positive HER2-negative breast cancer with oral CDK4/6 combined with an endocrine agent has significant survival conditions and manageable side effect profiles.

Keywords: metastatic breast surgery, hormone therapy, CDK4/6 inhibitor, survival, safety

[Abstract:0363]

LONG ACTING METASTASIS

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[2] Internal Medicine, Puerto Real University Hospital, Puerto Real, Cádiz, Spain

Case Description: 80-year-old woman, with a personal history of breast carcinoma T2N1Mx in 1986 and right nephrectomy in 1983; who was admitted to Internal Medicine for increased dyspnoea and dysphagia, probably related to a rapidly growing right cervical bultoma. Laboratory tests showed normocytic normochromic anaemia with Hb of 9.3 g/dL and a pattern of hepatic dissociated cholestasis.

Clinical Hypothesis: A complete CT scan was performed objectifying an infiltrative lesion in the right cervico-thoracic transition, in addition to a pulmonary nodule in the right upper lobe suggestive of pulmonary neoplasia and two pathologically sized right paratracheal and right hilar adenopathies.

Diagnostic Pathways: Gross acute biopsy of the infiltrative mass was performed by interventional radiology with histological diagnosis of clear cell renal carcinoma. The patient was therefore diagnosed with advanced clear cell renal carcinoma (metastatic lymph node and lung involvement and infiltrative mass in the cervical-thoracic transition) 40 years after surgical resection of the initial primary tumour.

Discussion and Learning Points: Renal clear cell carcinoma originates in the renal cortex and constitutes 80-85% of all primary renal neoplasms. It is most common in males, with a median age of diagnosis at 64 years. In 65% of cases, it is localised disease, but advanced disease (at diagnosis) has been reported in up to 16% of cases. Surgical resection of stage I to III clear cell renal cell carcinoma can be curative, but up to one third of patients relapse.

Keywords: neoplasm metastasis, carcinoma, renal cell

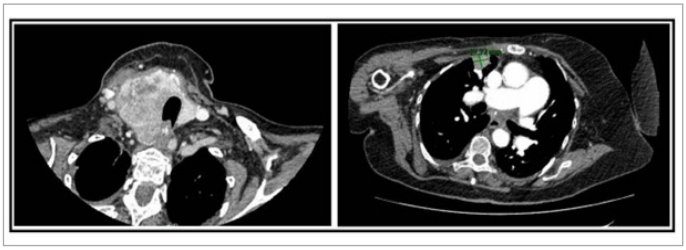

Figure 1. *Infiltrative lesion in the right cervico-thoracic transition, in addition to a pulmonary nodule in the right upper lobe suggestive of pulmonary neoplasia and two pathologically sized right paratracheal and right hilar adenopathies.*

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[Abstract:0368]

PROSTATE CANCER AND ESSENTIAL THROMBOCYTHEMIA: A CLUE FOR ASSOCIATION

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We report a case of a rare association of essential thrombocythemia (ET) and prostate cancer in an 83-year-old man. The patient presented with dysuria and constipation. Physical examination revealed a hard and nodular prostate gland. Laboratory tests showed an elevated platelet count and total serum PSA level. Bone marrow biopsy and prostate gland biopsy were performed, which confirmed the diagnosis of ET and prostate cancer, respectively. The patient was treated with hydroxyurea and referred to urology for further management. This is the first reported case of ET associated with localized prostate cancer. The etiopathogenesis of this association is not fully understood, but it may be related to the *JAK2V617f* mutation, which is present in both conditions. Further research is needed to investigate the relationship between ET and prostate cancer.

Keywords: *prostate cancer, essential thrombocythemia, JAK2V617f mutation*

[Abstract:0413]

CONSTITUTIONAL SYNDROME IN A 61-YEAR-OLD MALE

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61-year-old male with no allergies. Non-smoker. Drinker of 6 UBE daily. High blood pressure e hyperuricemia. Intestinal sub occlusion due to ileitis one year ago. Kidney injury under study by Urology. Previous surgery: cholecystectomy, thyroid nodule, umbilical hernia, pyloric stenosis. Barthel 100. Treatment: Losartan 100 mg/HCT 12.5 mg/24 h, Allopurinol 100 mg/24 h. He presented with asthenia, hyporexia, dyspnoeic sensation and deterioration of general condition lasting 3-4 weeks with associated unquantified weight loss. Analysis upon admission: Biochemistry: Gluc 107, Cr 1.56, Urea 71, FG 47, prot 7.0, GOT 115, GPT 182, GGT 833, FA 641, amylase 26, LDH 1096, Na 137, K 4.7, proBNP neg, Ca 9.1, P 3.5, Mg 2.14, PCR 212.5, PCT 4.33. Hematimetry 14.9, VCM 102.9, Leucos 14.74 (neutroph 11.04), plaq 450000. Coagulation: PT 17 sec, APTT 29.09 sec, INR 1.47, fibrinog 804. Urinalysis: negative, amylasuria negative. Abdominal CT and MRI were performed: multiple solid-appearing bilobar subcentimeter nodules, which may be related to secondary involvement in liver vs probable relationship with regeneration nodules. In the right anterior mesokidney, a 13-mm solid cortical nodule. Given the discordant results of the complementary tests, a liver biopsy was performed, which showed us an infiltrating malignant melanoma (max diameter of the lesion: 2.75 mm. Clark level IV, Breslow index 0.5 mm. The lesion was removed. During the course of the evolution, there was a continued elevation of transaminases with a profile of cholestasis and a deterioration in his general condition (day 30 of admission: ECOG 4) until death on day 40.

Keywords: *hypertransaminasemia, cholestasis, melanoma*

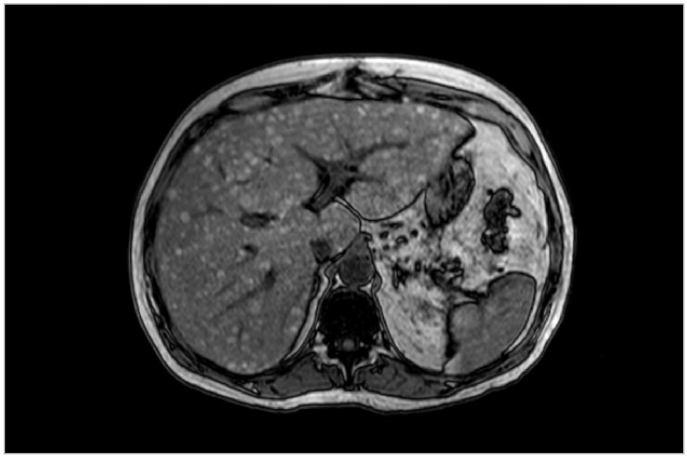

Figure 1. *Abdominal RMN.*

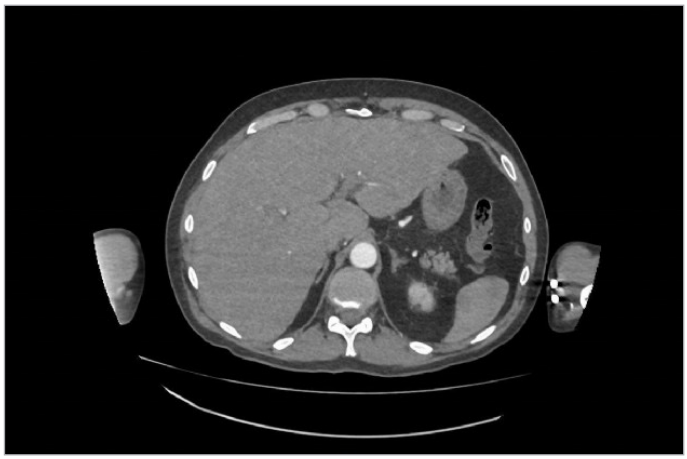

Figure 2. *Abdominal TC.*

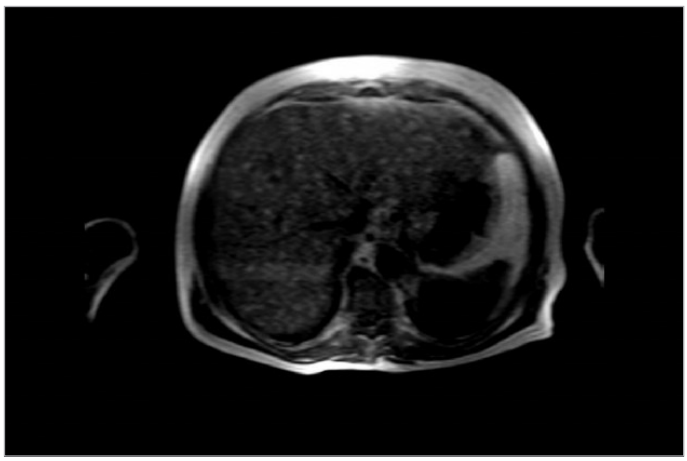

Figure 3. *Colangio RMN.*

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[Abstract:0419]

UNUSUAL PRESENTATION AND DIFFICULT DIAGNOSIS CASE OF AMYLOIDOSIS

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[2] Surgical Pathology, University Hospital Puerto Real, Puerto Real, Spain

[3] Internal Medicine, University Hospital Puerta del Mar, Cádiz, Spain

A 40-years-old woman, without previous medical history, consulted for exertional dyspnoea in the last 3 months. Physical exam was normal. Chest X-ray showed a mild cardiomegaly and electrocardiogram sinus rhythm with negative T waves in V4-V6. Laboratory test revealed mildly elevated pro-BNP (1800 pg/ml) and troponin I (90 ng/ml). Hemogram, renal and hepatic functions were normal. Echocardiography revealed myocardial hypertrophy and severe strain reduction suggesting infiltrative cardiomyopathy. Cardiac magnetic resonance confirmed that and ruled out pathological iron deposits or ischemia. Iron metabolism, proteinogram (Figure 1), plasmatic/urinary light chains, immunoglobulin G4, angiotensin converting enzyme and proteinuria determinations were normal. Abdominal ultrasound didn't show abnormalities. Bone tracer cardiac scintigraphy didn't suggest transthyretin deposits. Bone marrow and subcutaneous fat biopsy, performed looking for amyloidosis, were normal. Three months after initial consultation and without clear diagnosis, the patient was proposed for endomyocardial biopsy when she debuted with epigastric pain. An abdominal mass located in the gastrohepatic ligament and retroperitoneum was founded in abdominal computed tomography (CT) (Figure 2) suggesting lymphoproliferative disorder. Percutaneous CT-guided and echoendoscopy biopsies were performed with inconclusive results. Paraprotein analysis were determined again showing high levels of lambda free chains and immunifixation revealed monoclonal component not visible previously. Surgical open biopsy of the mass was compatible with amyloidoma (Figure 3). Finally, she was diagnosed with light chains amyloidosis (AL) and was treated with specific chemotherapy and autologous stem cell transplant. Evolution was favourable.

We presented a difficult diagnosis case of amyloidosis AL with an unusual presentation as tumour-like lesion formed by amyloid deposit.

Keywords: *amyloidosis, immunoglobulin light-chain amyloidosis, lymphoproliferative disorders, abdominal neoplasms, cardiomyopathies*

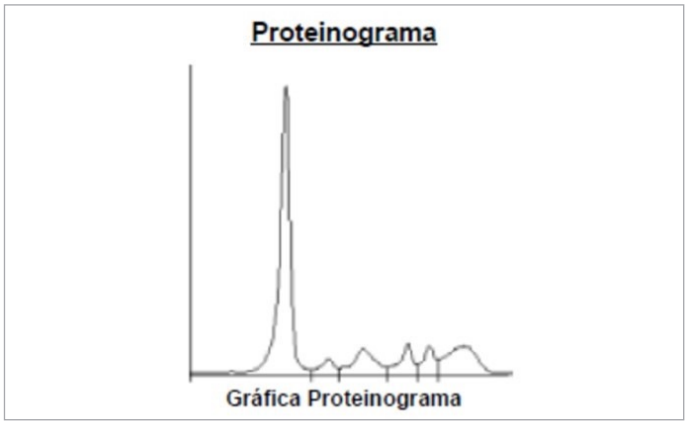

Figure 1. *Serum protein electrophoresis. No peak is observed in gamma zone.*

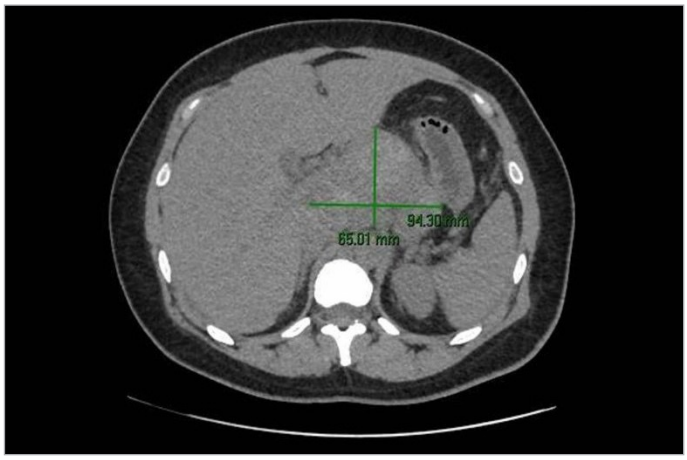

Figure 2. *Abdominal computed tomography showing mass in gastrohepatic ligament and retroperitoneum.*

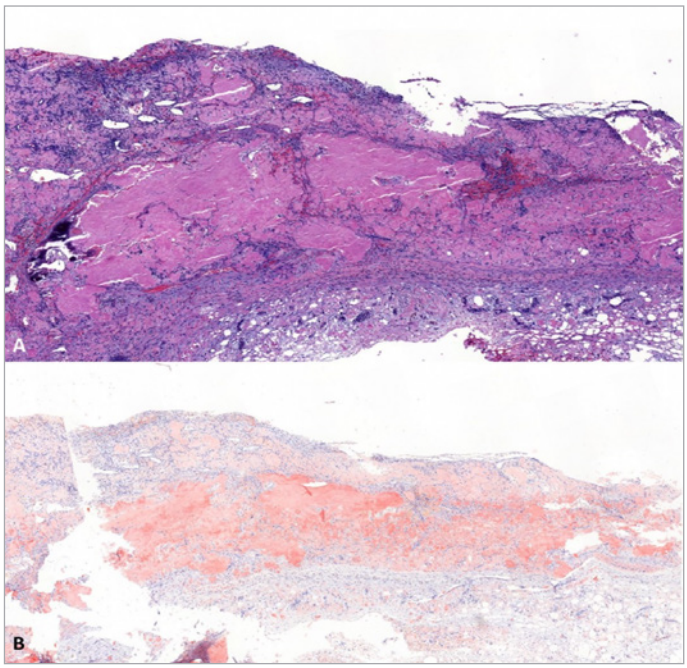

Figure 3. *Surgical biopsy of abdominal mass. A, haematoxylin-eosin stain showing connective tissue occupied by acellular material and chronic cell inflammatory infiltrate. B, Congo red stain showing positivity in the acellular material consisting with amyloidosis.*

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[Abstract:0422]

LENVATINIB PLUS PEMBROLIZUMAB IN ADVANCED/METASTATIC MELANOMA. INSIGHTS FROM A SINGLE CENTER STUDY

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Purpose: The innovative therapeutic combination of lenvatinib and pembrolizumab presents as a potential salvage option for metastatic melanoma. However, trials specifically assessing its efficacy in melanoma are limited.

Methods: Acknowledging the pressing demand for better alternatives in the metastatic melanoma setting, we undertook an analysis of a cohort of patients with metastatic melanoma, treated with pembrolizumab/lenvatinib.

Findings: A total of 44 patients, with a median age of 63.8 years at diagnosis and 67.1 at pembrolizumab/lenvatinib initiation, were included; 27 were female (61.4%). All were stage IV patients during pembrolizumab/lenvatinib treatment, and 8/43 patients (18.4%) were positive for BRAF mutations. Four patients (9.1%) received pembrolizumab/lenvatinib as second-line treatment, 21 patients (47.7%) as third, 12 patients (27.3%) as fourth, while 7 patients (15.9%) had received multiple treatment lines. The latest treatment prior to pembrolizumab/lenvatinib included nivolumab/ipilimumab (27.3%), nivolumab (20.5%), chemotherapy (15.9%), ipilimumab (11.4%), a combination of BRAF/MEK inhibitors (11.4%), pembrolizumab (6.8%), while 2.3% had received NKTR/nivolumab, 2.3% nivolumab/relatlimab and 2.3% pembrolizumab/MK1308. At a median follow-up of 8.6 months for surviving patients (65.9%), overall survival reached 84.2 months (95% CI, 49.1-119-3), while survival after pembrolizumab/lenvatinib administration was 16.6 months. There was no significant correlation between survival and BRAF mutation status, the number of previous treatment lines (≤2 vs >2), or the time elapsed between pembrolizumab/lenvatinib initiation and the discontinuation of the latest immunotherapy regimen (<6.7 vs ≥6.7 months).

Conclusions: Our study contributes a meaningful addition to the existing, limited literature, underscoring the imperative for further research in the setting of metastatic melanoma.

Keywords: *lenvatinib, pembrolizumab, melanoma, metastatic melanoma*

[Abstract:0427]

VENOTOCLAX ASSOCIATED HYPOTHYROIDISM IN A PATIENT WITH ACUTE MYELOID LEUKAEMIA

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Venetoclax is a selective, potent, orally bioavailable BCL2 inhibitor. Trials including combined modality treatment of venetoclax with HMAs have reported manageable adverse effects with these agents, mostly involving cytopenia. To our best knowledge, thyroid dysfunction either as hypo- or hyperthyroidism during venetoclax treatment was not reported yet as evidenced by a literature search. Here, we report a relapsed refractory AML patient who developed hypothyroidism while on venetoclax treatment. A 62-year-old female patient was referred to our centre for pancytopenia in April 2018.Following peripheral blood and bone marrow examinations she was diagnosed with RAEB-2 MDS. Azacitidine 75 mg/m^2 subcutaneously daily for 7 days was given in combination with venetoclax. Oral venetoclax was escalated (100 mg, 200 mg, 400 mg on days 1, 2, and 3, respectively).Patients then received 400 mg venetoclax daily, for 28-day cycles. During routine outpatient visits while on therapy, she had nonspecific symptoms like constipation and fatigue. She had developed hypothyroidism within a month of venetoclax/azacitidine treatment. After one cycle of venetoclax and azacitidine therapy, thyroid stimulating hormone (TSH) and serum free thyroxine levels (FT4) were found to be 42.86 µiU/ml (normal, 0.38–5.3 µIU/ml) and 0.34 ng/dl (normal, 0.6–1.12 ng/dl) respectively.Repeated tests demonstrated similar results. TSH and FT4 levels before venetoclax/azacitidine treatment were 1.7 µIU/ml and 0.84 ng/dl, respectively. Ultrasonographic examination of the thyroid showed a homogenously enlarged gland (Fig.1). Antithyroglobulin and antimicrosomal antibodies were not detected. There was no history of previous or concomitant treatments, including interferon, amiodarone, radiation therapy to the neck and brain, which are known to be contributing to thyroid dysfunction or thyrotropic hormone dysregulation. Thyroid hormone replacement therapy was started and thyroid function tests were normalized. We have continued venetoclax treatment because of good response along with thyroid hormone replacement therapy.

Keywords: *venetoclax, hypothyroidism, AML*

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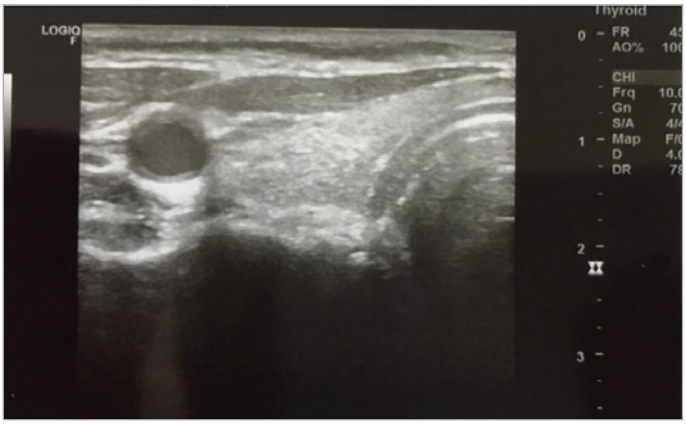

Figure 1. Thyroid ultrasonography of our patient showing homogeneous parenchyma with normal echogenicity.

[Abstract:0437]

OXALIPLATINE-INDUCED IMMUNE THROMBOCYTOPENIA IN A PATIENT WITH PANCREAS CANCER

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Case Description and Diagnostic Pathways: A 55-year-old man with stage 4 pancreatic carcinoma. We reported a case of oxaliplatin-induced immune thrombocytopenia (OITP) during the 18th cycle of oxaliplatin, folinic acid and 5-fluorouracil combination chemotherapy cycles. Before starting treatment the patient's, the platelet count was 241,000/mL. Oxaliplatin infusion was stopped because the patient had shivering and temperature was 37.4°C at the beginning of the oxaliplatin infusion. Follow-up of the patient, petechiae was observed on his trunk and arms. In the control blood count, platelets were 2,000/mL, but no related abnormalities were observed in coagulation tests. There was no sign of venous thromboembolic disease or disseminated intravascular coagulation. In the peripheral smear, maximum 1 platelet in each area and the presence of schistocytes and microspherocytes was not observed. Methylprednisolone and platelet infusion were administered. The platelet count was still 2,000/mL. Started on daily plasmapheresis and 100 mg methylprednisolone treatment for the following 3 days. In the blood count taken after plasmapheresis and steroid treatment, platelets were 80,000/mL, and fingertip peripheral blood smear showed platelets between 150,000-200,000. The patient was discharged 7 days after oxaliplatin infusion.

Clinical Hypothesis: Oxaliplatine-induced immune thrombocytopenia.

Discussion and Learning Points: OITP is a rare, highly life-threatening side effect that can occur immediately after oxaliplatin infusion. Steroids are typically used to treat drug-associated thrombocytopenia. Clinicians should be aware of the possibility of OITP developing at any time during treatment with the oxaliplatin-based chemotherapy protocol and the possibility of oxaliplatin-induced haematological emergencies.

Keywords: oxaliplatin, oxalipatine-induced immune thrombocytopenia, steroid treatment, plasmapheresis

[Abstract:0438]

NON-HODGKIN'S LYMPHOMA OF THE BREAST: TWO UNUSUAL CASE REPORTS

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Centro Hospitalar Póvoa de Varzim / Vila do Conde, Portugal

Lymphomas represent a broad and heterogeneous group of lymphocytic malignancies, with primary non-Hodgkin lymphomas of the mammary gland being a rare entity. Clinically they usually present as a solitary nodule; B symptoms are not frequent; they normally affect women between the fifth and sixth decades of life. We present here two cases of women, both aged 60 and without significant personal or family history of cancer. Both were referred by Surgeons due to a nodular lesion in the right breast. Neither of them had weight loss, nocturnal sweats or palpable peripheral adenopathies.

In both cases the patients were submitted to aspirate biopsies, which the cytologies were suggestive of lymphoma. Then, both underwent lumpectomy for clarification of the subtype and the hystologies revealed to be follicular lymphoma and diffuse large B cell lymphoma EBV negative. Both patients had negative bone marrow biopsies. They were proposed for chemotherapy (RCHOP) and subsequent local radiotherapy.

The relevance of these cases is that the clinical and radiological presentation of breast lymphoma is similar to other tumours of the mammary gland, however, cytology is not enough to determine the subtype and their approach is mainly based on chemotherapy (with or without radiotherapy). The prognosis depends mainly on the staging, histological subtype and the patient status.

Keywords: breast, primary, lymphomas

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[Abstract:0442]

PRIMARY CUTANEOUS CD8+ AGGRESSIVE EPIDERMOTROPIC CYTOTOXIC T-CELL LYMPHOMA (CD8+ PCAETL) AND HEMOPHAGOCYTIC SYNDROME: A RARE CASE REPORT

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[2] General Hospital of Thessaloniki, "George Papanikolaou", Thessaloniki, Greece

Case Description: A 68-year-old patient was admitted to the hospital due to diplopia, left eyelid ptosis and annular rash on the left upper and lower limb as well as his torso. Clinical examination revealed left pupil in mydriasis, left eyelid ptosis, paresis of the oculomotor muscles except from the left abductor, hypesthesia of the left lower limb from the middle of the tibia and below. Initial bloodwork and brain CT had no significant findings.

Clinical Hypothesis: The presence of a systematic disease, infection or ischemic stroke was examined.

Diagnostic Pathways: During admission, the patient was evaluated by dermatologists, neurologists, and ophthalmologists. Full blood analysis was performed to exclude neurosyphilis, neurosarcoidosis, Systemic Lupus Erythematosus, viral or bacterial infection. Blood and urine cultures were negative. A complete immunological and coagulation control was performed as well as brain MRI, full body CTs, muscle and skin biopsy, myelogram, bone marrow biopsy and lumbar puncture. All tests came out negative except from the muscle biopsy which showed intense phagocytosis of the muscle by macrophages and the skin biopsy which showed an aggressive epidermotropic cytotoxic t-cell lymphoma. During hospitalization, the patient presented high fever, splenomegaly, cytopenia, hypertriglyceridemia, extremely high levels of serum ferritin, satisfying all the criteria of the hemophagocytic syndrome. The patient was treated with corticosteroids and etoposide with no signs of improvement.

Discussion and Learning Points: Our case confirmed that Hemophagocytic Syndrome can be linked to a very rare case of cytotoxic t-cell lymphoma and, if not treated quickly, evolves fatally.

Keywords: *cutaneous lymphoma, CD8+, hemophagocytic syndrome*

[Abstract:0475]

BALLOON RELEASE IN AN IMMUNOSUPPRESSED PATIENT: AN UNEXPECTED ETIOLOGY

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The clinical case involves an 88-year-old man with a history of psoriatic arthritis and prostate adenocarcinoma. He presents symptoms such as asthenia, dry cough, progressive dyspnoea, a 3 kg weight loss and early satiety. Medical exams reveal radiological findings of lung lesions and a retrocardiac mass. After diagnostic tests, primary lung cancer with metastasis is suspected. However, a lung biopsy suggests the possibility of grade 3 lymphomatoid granulomatosis or diffuse large b-cell lymphoma (DLBCL).

The patient discontinues methotrexate and undergoes further tests, including a brain MRI and a PET-CT scan, confirming bilateral hypercaptant lung lesions. Suspecting lymphomatoid granulomatosis, treatment commences with Rituximab and descending-dose prednisone. A follow-up after 6 months shows resolution of nodular opacities. Lymphomatoid Granulomatosis is a rare lymphoproliferative disorder associated with the Epstein-Barr virus. It manifests with symptoms akin to advanced lung cancer and is characterized by lung nodular lesions, predominantly in the lower lobes, along with fever, dyspnoea, cough, and weight loss. Though less common, it can affect other organs.

The diagnosis is confirmed through histopathological findings, showing a polymorphic lymphocytic infiltrate, necrosis, and the presence of Epstein-Barr virus in B cells. Treatment may vary from discontinuation of immunomodulators to chemotherapy resembling DLBCL or Rituximab in more advanced cases.

In summary, lymphomatoid granulomatosis is an uncommon lymphoma that should be considered in immunosuppressed patients. It predominantly affects the lungs and is characterized by specific clinical presentation and histopathological findings, with treatment options resembling other B-cell lymphomas, depending on disease stage and severity.

Keywords: *lymphomatoid granulomatosis, Epstein-Barr virus, lymphoproliferative disorder*

[Abstract:0483]

SMALL CELL LUNG CANCER IN A PATIENT WITH ECTOPIC ACTH SYNDROME AND ELEVATED PROCALCITONIN: CASE REPORT

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Procalcitonin, conventionally recognized as an indicator of bacterial infections, has shown relevance beyond infectious pathologies, notably in certain tumour-related conditions. This

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case report depicts a 58-year-old male admitted with symptoms suggestive of pneumonia but ultimately diagnosed with small cell lung carcinoma (SCLC), alongside ectopic adrenocorticotropic hormone (ACTH) syndrome and elevated procalcitonin levels.

The patient presented with a two-week history of non-productive cough, fever, dyspnoea, medical comorbidities including hypertension. Clinical examination revealed bilateral lung crackles and skin hyperpigmentation. Laboratory findings PO2: 55 mmHg (80-100), Na: 146 mmol/L (reference range: 136-146), K: 2.01 mmol/L (3.5-5), CRP 59.7 mg/L (reference range: 0-5), and procalcitonin 36.2 ng/mL (0-2). Morning cortisol was 82.5 ug/dl, and ACTH was markedly elevated at 442 ng/L Imaging studies identified a bronchial obstructive lesion and hepatic metastases, confirmed through liver biopsy as metastatic SCLC.

Despite initial antibiotic therapy for presumed pneumonia, the patient's deteriorating clinical status, escalating CRP and persistent elevation of procalcitonin prompted antibiotic modification. Following a prolonged antibiotic course, procalcitonin levels remained elevated, correlating with malignancy rather than infection.

This case underscores the complex diagnostic implications of procalcitonin elevation, extending beyond bacterial infections, as evidenced by the concurrent presence of ectopic ACTH syndrome and SCLC. The association between elevated procalcitonin and non-infectious pathologies emphasizes its role as a potential biomarker for paraneoplastic syndromes, urging clinicians to consider malignancies in the absence of classical infectious symptoms. Accurate interpretation of procalcitonin levels is crucial in guiding appropriate clinical management, especially when assessing non-infectious aetiologies in malignancies.

Keywords: *procalcitonin, bacterial infection, malignancy, paraneoplastic, non-infection*

[Abstract:0520]

A RARE CASE OF EXTRAMEDULLARY PLASMACYTOMA PRESENTING AS PARAVERTEBRAL MASS

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A 75-year-old man presented with persistent neck pain and, upon evaluation, he was found to have reduced muscle strength and sensation in the C7-C8 regions. Imaging tests revealed a mass in the left dorsolateral musculature that invaded the spinal canal and C7 conjunctival foramina (Figure 1). The main diagnostic suspicions were rhabdomyosarcoma, tuberculoma, lymphoma and plasma cell tumours.

Further tests, including ^{18}F-FDG-PET/CT scan, ultrasound-guided biopsy, and blood and 24-hour-urine analyses, were conducted. A gamma fraction peak of IgG lambda monoclonal component and Bence-Jones proteinuria were identified. On ^{18}F-FDG-PET/CT, the lesion was hypermetabolic, with no other foci (Figure 2). The biopsy showed infiltration by clonal plasma cells with aberrant immunophenotype consistent with plasmacytoma (Figures 3 and 4). The bone marrow aspiration carried out subsequently detected 2.5% of aberrant plasma cells. Treatment was based on local radiotherapy with adjuvant systemic drug therapy including Daratumumab.

Solitary extramedullary plasmacytomas (SEP) constitute an uncommon form of plasma cell neoplasms. It is crucial to suspect SEP when evaluating tumours despite lacking typical plasma malignancy end-organ damage (i.e. anaemia, kidney impairment, additional bone lesions or hypercalcemia) on the initial work-up tests.

Bibliography:

Rajkumar SV, Dimopoulos MA, Palumbo A, et al. International Myeloma Working Group updated criteria for the diagnosis of multiple myeloma. Lancet Oncol 2014; 15:e538.

Keywords: *solitary, extramedullary, plasmacytoma*

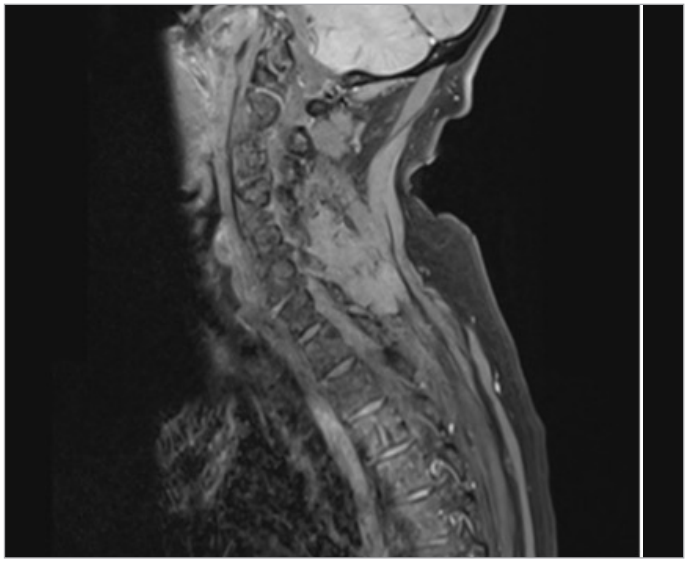

Figure 1. *Mass in the left paravertebral region (MRI).*

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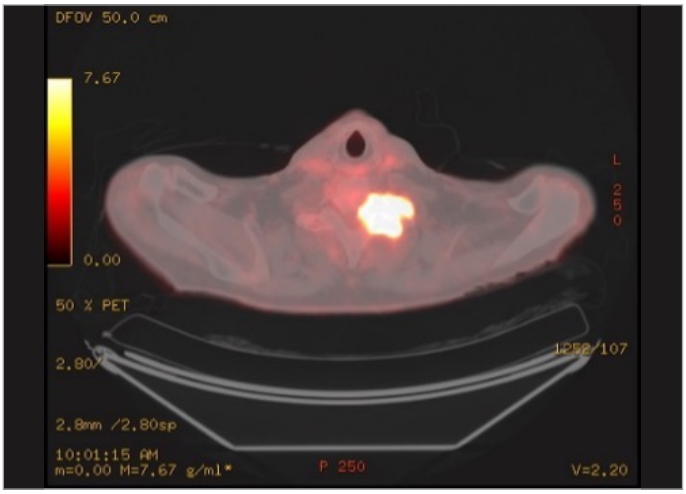

Figure 2. Hypermetabolic mass in the left paravertebral region (18F-FDG-PET/CT).

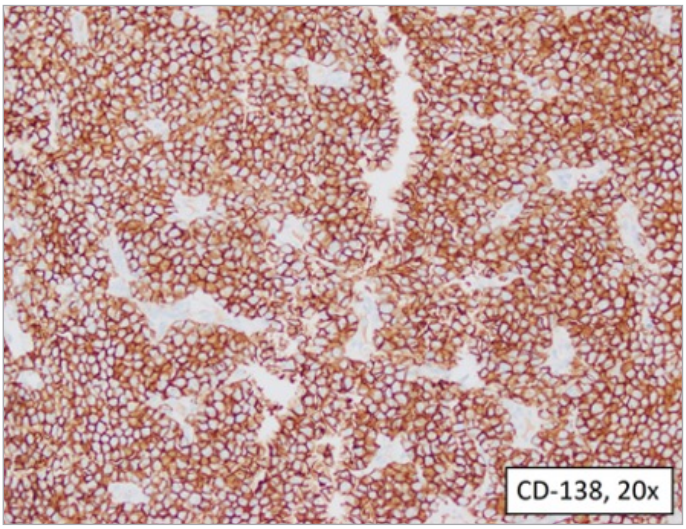

Figure 3. Clonal plasma cells with immunohistochemical positivity for CD138 (analysis of the paravertebral mass).

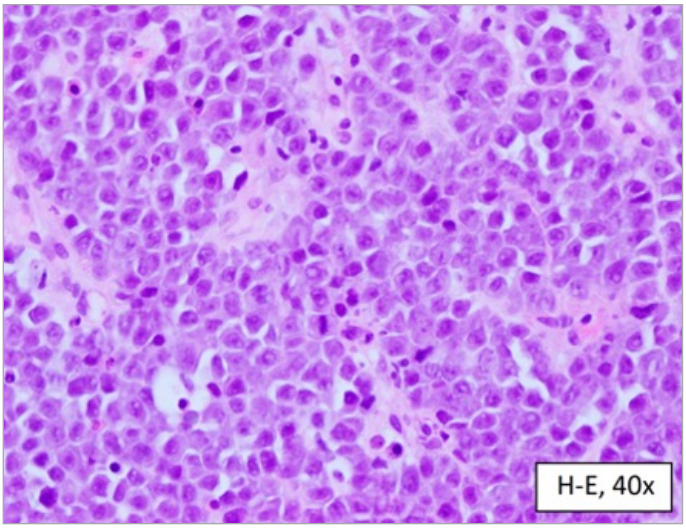

Figure 4. Proliferation of plasma cells with an atypical profile (H&E-stained sample of the paravertebral mass).

[Abstract:0537]

PARANEOPLASTIC DERMATOSIS: FROM SUSPICION TO A DIAGNOSIS

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Paraneoplastic dermatoses are a wide group of skin disorders that occurs concurrently with internal malignancies, without entry of tumour cells into the skin. This group includes some bullous dermatoses like Paraneoplastic pemphigus (PP) and Mucous membrane pemphigoid (MMP), which are characterized by blister formation on both skin and mucosal surfaces. We present the case of a 64-year-old woman that presents in emergency room with a one-week generalized macular rash that affected the trunk, abdomen, face, limbs and palms. She also referred bullous lesions of the oral mucosa, fists and feet, dysphagia and pain with defecation. Blood analysis had no significant changes. She was medicated with systemic corticoids and referred to an ambulatory consultation for monitoring. After a short period of remission with systemic corticoids, skins lesions recurred. Paraneoplastic causes were search with a colonoscopy revealing a suspicious colon ulcerated lesion, suggestive of neoplasm. Histological examination of this lesion was positive for Low-grade invasive adenocarcinoma (G2). A skin biopsy revealed discrete non-specific chronic inflammatory changes. a further observation by a Dermatologist validated our presumption of bullous paraneoplastic dermatosis. The patient was referred to the general surgery consultation for further study and treatment. A left hemicolectomy was performed. There was no need of adjuvant therapies and the patient was considered cured. Four months after surgery, no remission of skin lesions was noticed, which supports the diagnosis of paraneoplastic dermatosis. We aim to alert our colleges for paraneoplastic dermatosis, particularly those with bullous presentation, which requires a high index of suspicion.

Keywords: bullous paraneoplastic dermatosis, skin lesions, blister formation

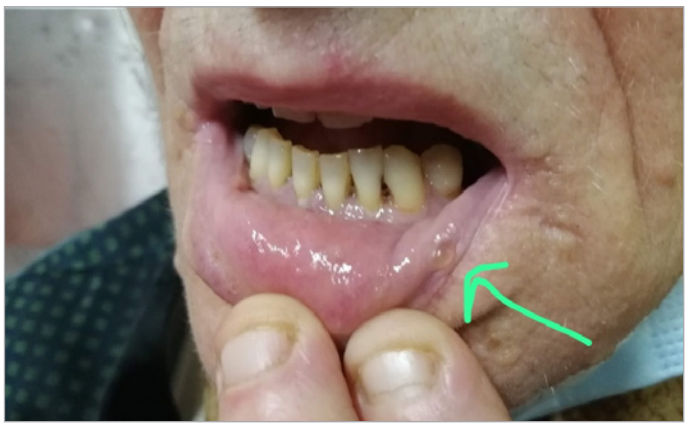

Figure 1. Lesions - oral mucosa.

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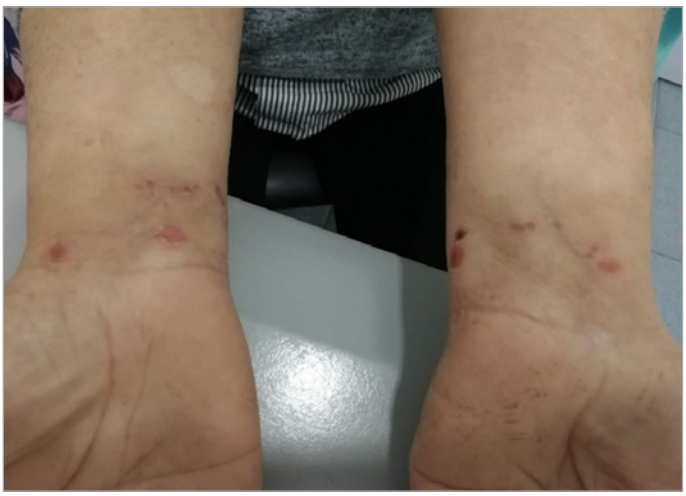

Figure 2. Skin lesions - fists.

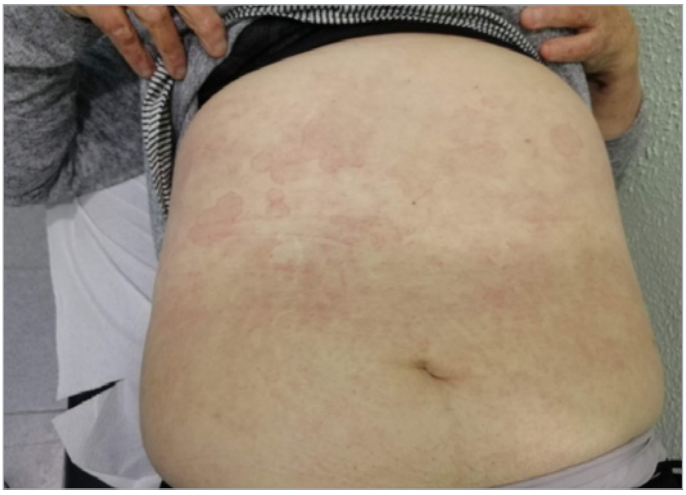

Figure 3. Skin lesions - abdomen.

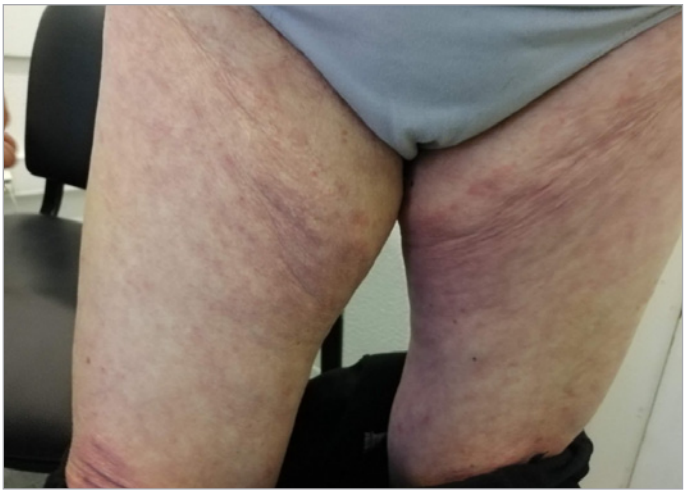

Figure 4. Skin lesions - limbs.

[Abstract:0543]

SECONDARY ERYTHROBLASTOPENIA, AN UNCOMMON CAUSE OF NON-REGENERATIVE ANAEMIA

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In this clinical case, a 72-year-old woman with multiple health issues, including hypertension, chronic kidney disease, atrial fibrillation, and severe aortic stenosis treated with TAVI, presented with fatigue, shortness of breath, and dizziness, leading to hospitalization. She was found to have severe anaemia, diagnosed as pure red cell aplasia (PRCA) secondary to granular T-cell leukaemia, an uncommon association. Despite treatment with corticosteroids, the patient did not respond adequately, and cyclophosphamide was added to the immunosuppressive regimen, resulting in significant improvement and a reduction in the need for blood transfusions. PRCA is a rare condition where the body fails to produce enough red blood cells due to the destruction of stem cells in the bone marrow. In this case, PRCA was secondary to a specific form of granular T-cell leukaemia, making it especially challenging to manage. The patient was treated with a combination of corticosteroids and cyclophosphamide, achieving significant clinical improvement. This case highlights the importance of accurate diagnosis and a multidisciplinary approach in managing complex and rare haematological conditions. Collaboration between specialists, such as haematology and internal medicine, was crucial for the effective treatment of this patient.

Keywords: *erythroblastopenia, anaemia, LGLL*

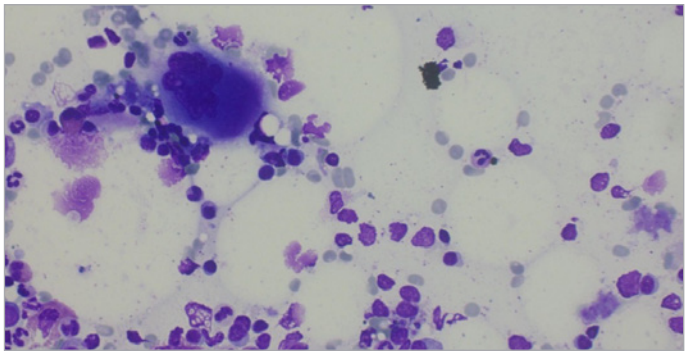

***Figure 1.** Bone marrow aspiration.*
An enlarged megakaryocyte is observed, along with cells in various maturation stages of the granulocytic series and some lymphocytes and plasma cells. No erythroblasts are observed throughout the sample.

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[Abstract:0579]

PANCOAST TUMOUR – REMEMBERING THE ASSOCIATED SYNDROMES

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An 81-year-old patient, a 100 pack-year smoker, admitted to the Emergency Department due to dyspnoea, dry cough, weight loss and right shoulder pain. Chest X-ray revealed right upper lobe opacity and pleural effusion. Chest tomography showed a heterogeneous mass, with central necrosis, amputation of the bronchus and atelectasis of the right upper lobe, suggestive of neoplasia. With progression to shock and respiratory failure, it was not possible to carry out a confirmatory anatomopathological study, but the clinical picture is compatible with pancoast tumour. These tumours are associated with superior vena cava, Horner or Pancoast syndromes, resulting from compression of local nervous or vascular structures, with the patient's pain being caused by Pancoast syndrome. We intend to alert clinicians to this disease and encourage the diagnosis of associated syndromes.

Keywords: *pancoast, dyspnoea, lung cancer*

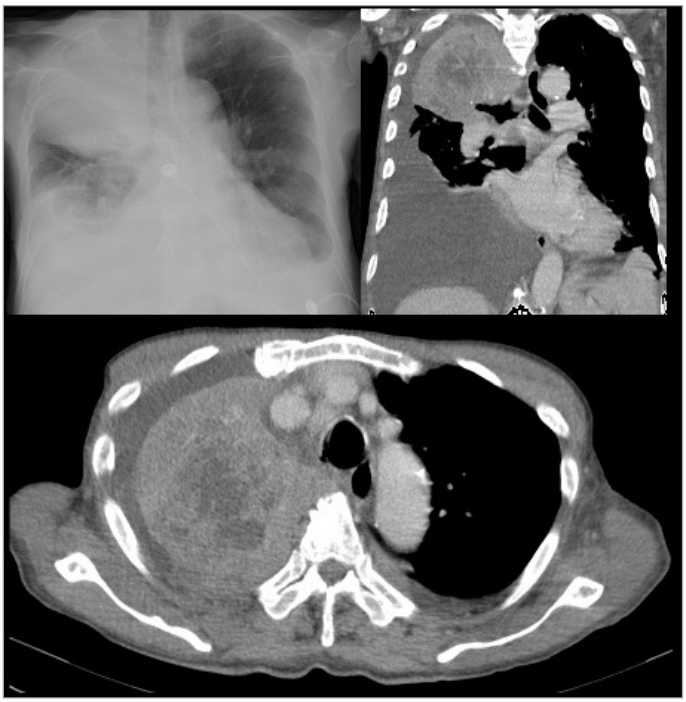

Figure 1. *Chest X-ray with opacity of the right upper lobe and pleural effusion and chest tomography images confirming the heterogeneous mass, with central necrosis, amputation of the bronchus and atelectasis of the right upper lobe.*

[Abstract:0580]

TAMOXIFEN-ASSOCIATED BILATERAL PULMONARY THROMBOEMBOLISM

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We present a case of a 72-year-old man with a history of hypertension, type 2 diabetes mellitus, and stage IIA infiltrating ductal carcinoma of the left breast diagnosed two years prior. The patient had undergone mastectomy, paclitaxel chemotherapy, adjuvant radiotherapy, and was on tamoxifen therapy, showing no evidence of tumour activity during regular Oncology monitoring.

He presented to the emergency department with sudden-onset central chest pain lasting 10 hours and dyspnoea on minimal exertion, accompanied by sinus tachycardia on examination.

Urgent pulmonary CT angiography confirmed bilateral subsegmental pulmonary artery contrast repletion defects. There was no ventricular dysfunction or thrombi in the lower limbs, and a thrombophilia study was requested, which was negative. Both cancer and tamoxifen treatment are predisposing factors for thromboembolic disease.

Pulmonary thromboembolism is up to 9 times more frequent in patients with active cancer than in the general population, in fact, it is the second cause of death in this population. Breast cancer is not one of the most common cancers associated with thromboembolic disease. According to the series, the incidence of VTE in these patients is 0.9%.

However, tamoxifen use itself carries a heightened risk of venous thromboembolism. In light of this, tamoxifen was replaced with letrozole, though the latter is also linked to thrombosis, prompting the decision to continue anticoagulant treatment throughout the patient's exposure to these agents or other prothrombotic factors. This case underscores the importance of recognizing and managing thromboembolic complications in cancer patients undergoing hormone therapy, ensuring vigilant monitoring and timely intervention.

Keywords: *tamoxifen, pulmonary thromboembolism, breast cancer*

[Abstract:0632]

HYPERTENSIVE PULMONARY OEDEMA AS PRESENTATION OF A BILATERAL PHEOCHROMOCYTOMA: A CLINICAL CASE

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Introduction: Pheochromocytoma, a neuroendocrine tumour derived from adrenal chromaffin cells, frequently presents with

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the characteristic triad of headache, palpitations and diaphoresis. However it can present with more acute situations such as hypertensive pulmonary oedema which requires a rapid diagnosis and initiation of therapeutics.

Case Presentation: Female patient, 27 years old, with a condition characterized by paroxysms of headaches, palpitations, and diaphoresis. Admitted to the Emergency Department due to worsening symptoms, presenting with hypertension (BP 190/140 mmHg), tachycardia (140 bpm), and fever (38.5°C). Analysis showed elevated levels of plasma and urinary fractionated metanephrines and catecholamines, elevated troponin I (7049 ng/L), NTproBNP (2588 pg/mL), and creatinine (2.0 mg/dL). Additionally, voluminous bilateral masses suspected of neoplasia were observed in the adrenal glands, in the abdominopelvic computed tomography. A worsening of the condition was observed with dyspnoea and hypoxemia, leading to the diagnosis of acute pulmonary oedema in the context of malignant hypertension. Treatment with beta-blocker, alpha-blocker, and calcium channel blocker was initiated, resulting in improvement of symptoms.

After stabilization, PET-CT with DOTANOC was performed which showed malignant neoplastic activity in the bilateral adrenal regions compatible with pheochromocytoma, excluding metastatic disease. Following multidisciplinary discussion, bilateral adrenalectomy was performed and the patient was discharged, asymptomatic, under adrenal replacement therapy. Histopathological examination of the biopsy later confirmed bilateral pheochromocytoma.

Discussion: Pheochromocytoma is a rare clinical entity that presents with various cardiovascular manifestations. It should be excluded in young patients presenting with malign hypertension and treatment involves non-selective blockade of the adrenergic system as well as adrenalectomy.

Keywords: *pheochromocytoma, pulmonary oedema, malign hypertension*

[Abstract:0640]

TITLE: A VERY RARE METASTASIS OF GASTRIC SIGNET RING CELL CARCINOMA; LEPTOMENINGEAL METASTASIS CASE

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Introduction: Leptomeningeal disease (LMD) is one of the most serious complications that can be seen in cancer patients. While the peritoneum, liver, lung, bone, and lymph nodes are the most common metastatic sites of gastric cancer, LMD is very rare.

Case Report: A 59-year-old metastatic gastric adenocarcinoma patient complained of hearing loss. The contrast-enhanced temporal magnetic resonance imaging (MRI) did not detect any metastasis. Two months after the last brain MRI, the patient admitted with complaints of confusion, difficulty in speaking and walking, and hearing loss. The patient hospitalized in neurology clinic. The contrast-enhanced brain MRI did not show any metastasis. The cytological assessment of the cerebrospinal fluid revealed adenocarcinoma cells.

Conclusions: LMD is an extremely rare condition in patients with gastric cancer, and it is important to remember that the gold standard for diagnosis is the detection of malignant cells in the cerebrospinal fluid.

Keywords: *cerebrospinal fluid, gastric cancer, chemotherapy, leptomeningeal metastasis, neurological symptoms*

[Abstract:0641]

SMALL CELL NEUROENDOCRINE CANCER OF THE OVARY

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Aim: Small cell carcinoma of the ovary (SCCO) is a rare type of cancer that constitutes less than 0.01% of all ovarian cancers. In this case, it was aimed to present the small-cell NET of the ovary, which is rarely encountered and has a poor prognosis, guided by pathological findings.

Case Presentation: An 82-year-old female presented to the outpatient clinic with complaints of abdominal distension and abdominal pain. An abdominal MRI was planned with suspicion of a malignancy.

The abdominal MRI revealed a 7.5 cm solid mass lesion within the mesenteric fat tissue in the right upper quadrant and a solid-cysticmixed lesion approximately 10 cm in diameter in the right ovarian location. The patient was referred to the interventional radiology clinic and an ultrasound-guided 18-G tru-cut needle biopsy was performed from the 7 cm solid mass lesion in the upper right lateral aspect of the umbilicus. The pathology resulted as small-cell neuroendocrine carcinoma of the ovary. Immunohistochemistry stainings for synaptophysin, PGP9.5, CD56, PAX8, Cytokeratin 7 (focal+), P16,P53 (mutant type), Pan-cytokeratin (focal+), WT-1, and INI1 were positive, while chromogranin, inhibin, cytokeratin 20, ER, TTF-1,CD117, and NSE were negative. A F18-FDG positron emission tomography (PET) was planned for staging of the tumour.

Conclusions: SCCO and its rarer subtype according to the old classification, SCCOPT, are extremely rare types of cancer. Very few cases have been reported in the literature. More data is

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required to gain further knowledge about the diagnosis, course, and treatment of this extremely rare cancer.

Keywords: *small cell carcinoma the ovary (SCCO), SCCOPT, neuroendocrine tumour of the ovary*

[Abstract:0660]

EVALUATION OF THE DIAGNOSTIC STAGE AND DIAGNOSIS PATTERNS OF PATIENTS DIAGNOSED WITH LUNG CANCER DURING THE COVID-19 PANDEMIC PERIOD

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Aim: In our study, we aimed to contribute to cancer studies in our country by investigating whether there was an increase in the incidence of incidental lung cancer detection in patients diagnosed with lung cancer in Ankara Bilkent City Hospital during the pandemic period compared to the pre-pandemic period and whether patients diagnosed with lung cancer had an earlier stage and lower mortality.

Materials and Methods: In this study, we analysed the data of 196 patients with lung cancer who were followed up in the Medical Oncology department of Ankara Bilkent City Hospital between March 1, 2019 and March 1, 2021. Patient files and clinical characteristics were analysed. The mode of diagnosis, complaints at admission, diagnostic stage of incidental cases, disease course, mortality and clinical laboratory data were collected. The patients included in the study were divided into two groups according to the date of diagnosis: pre-pandemic and pandemic period.

Conclusions: There was no statistically significant difference between the pre-pandemic and pandemic process groups in terms of initial complaints, methods of diagnosis, stages at the time of diagnosis, mortality rates and progression-free survival rates. In terms of mortality in lung cancer, progression in disease stage, high LDH and low albumin levels increase the mortality hazard ratio, while being diagnosed during the pandemic period does not affect the mortality hazard ratio. Especially in our centre, thanks to the measures taken for the COVID-19 pandemic, there was no disruption in the diagnosis, follow-up and treatment processes of patients with lung cancer.

Keywords: *lung cancer, COVID-19, clinical oncology*

[Abstract:0671]

"ECTOPIC ACTH SYNDROME: A RARE CAUSE - A CASE OF RECTAL NEUROENDOCRINE CARCINOMA"

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Ectopic ACTH Syndrome (EAS) accounts for 20% of ACTH-dependent Cushing's syndrome cases and arises from neuroendocrine or other tumour origins. This case discusses a rare cause of EAS, which is rectal carcinoma secreting ectopic ACTH.

A 71-year-old female presented with a three-month history of lower extremity weakness and difficulty walking, leading to admission to the Internal Medicine clinic for resistant hypokalemia and metabolic alkalosis. Her medical history included a decade of hypertension and a recent diagnosis of diabetes mellitus. Physical examination revealed general stability, clear consciousness, and 3/5 muscle strength in the right lower extremity. Laboratory results indicated normocytic anaemia, lymphopenia, neutrophilia, hypokalemia (1.8 mmol/L), and metabolic alkalosis. The differential diagnosis considered adrenal pathologies like hypokalemic metabolic alkalosis-related primary aldosteronism and Cushing's disease, as well as conditions associated with renal tubulopathies. Further investigations showed elevated 24-hour urinary free cortisol (990 µg/24 hours) and plasma ACTH (396.2 ng/L). Cortisol suppression was not achieved in the low-dose dexamethasone suppression test (78.9 µg/dL), and pituitary MRI was normal. Colonoscopy revealed an ulcero vegetative lesion, and biopsy confirmed poorly differentiated carcinoma infiltration. PET-CT displayed tumour images consistent with colonoscopy findings, widespread lymphadenopathies, and intense hypermetabolism in skeletal lesions. Hypokalemic metabolic alkalosis was attributed to Ectopic ACTH Syndrome (EAS), with a focus on a poorly differentiated neuroendocrine rectal carcinoma. Unfortunately, the patient succumbed on the 14th day due to widespread metastatic disease and multiple organ failure. Rectal neuroendocrine tumours cause EAS with poor prognosis. Surgical treatment is often insufficient, especially in metastatic cases.

Keywords: *hypokalemia, rectal neuroendocrine tumours, ectopic ACTH syndrome*

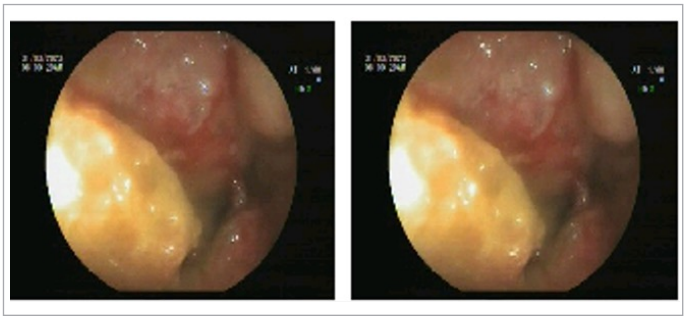

Figure 1. *A tumour formation showing intense hypermetabolism, extending approximately 132 mm along the segment from the rectum to the vagina.*

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[Abstract:0685]

A RARE CASE OF AN AGGRESSIVE RELAPSING SUBCUTANEOUS PANNICULITIS-LIKE T-CELL LYMPHOMA IN A 31-YEAR-OLD MOTHER

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Subcutaneous panniculitis-like T-cell lymphoma (SPTCL) is a rare form of indolent lymphoma that is usually confined to the subcutaneous tissue. Herein we present the case of a 31-year-old female that was diagnosed with a severe and aggressive form of SPTCL. Initially, the patient presented to another hospital with red firm nodules on her right upper thigh accompanied by fever. A diagnosis of cellulitis was made and a course of oral antibiotics was initiated. As a result of further worsening of the patient's clinical status, with higher fever and enlargement of skin nodules, a possible diagnosis of necrotizing fasciitis was considered and the patient was treated with surgical incisions and drainage. Despite the use of broad-spectrum IV antibiotics, further clinical deterioration led to the transfer of the patient to the Laikon General Hospital of Athens, where hemophagocytic lymphohistiocytosis was diagnosed based on laboratory findings and bone marrow biopsy. The patient was started on IVIG and dexamethasone while waiting for skin biopsy results (acquired from one of the subcutaneous lesions). One week later, skin biopsy revealed an SPTCL and the patient was started on cyclophosphamide/doxorubicin/etoposide/vincristine/prednisone (CHOEP) with significant clinical and hematological improvement. However, 3 months later and after 5 courses of CHOEP, the patient exhibited a relapse with new lesions in her torso, hands and feet. She received a salvage therapy with 3 cycles of etoposide/methylprednisolone/high-dose cytarabine/cisplatin (ESHAP), followed by a successful autologous bone marrow transplantation. One-year post transplantation the patient remains healthy with no signs of relapse.

Keywords: *panniculitis, T-cell lymphoma, SPTCL, hemophagocytic lymphohistiocytosis*

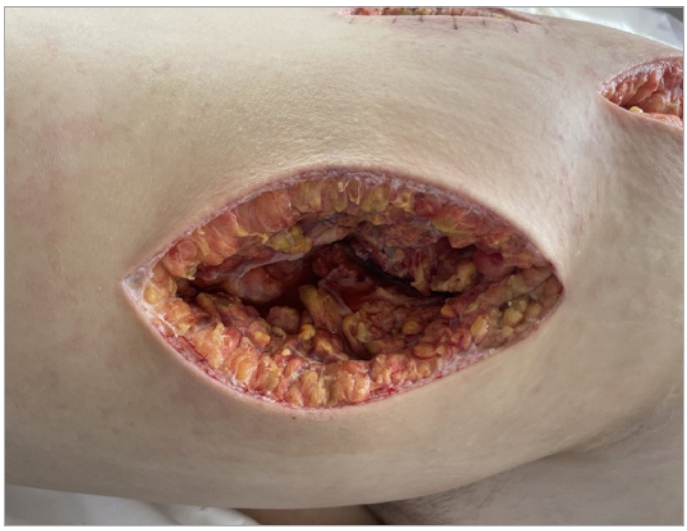

Figure 1. *Surgical incisions performed in order to treat a possible necrotizing fasciitis.*

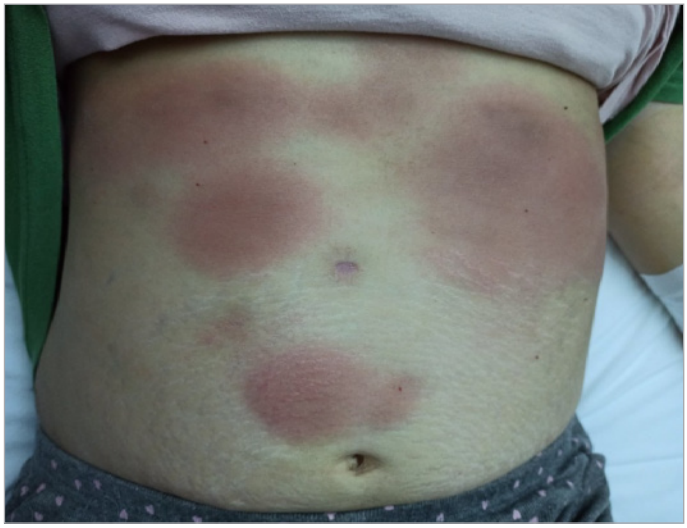

Figure 2. *Growing red subcutaneous nodules/lesions on the patient's torso.*

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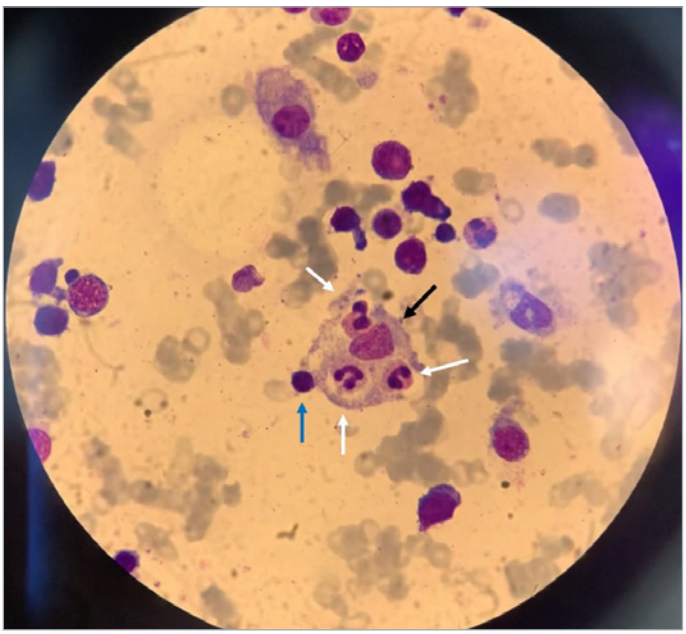

Figure 3. Hemophagocytic lymphohistiocytosis on the bone marrow biopsy of our patient.
Bone marrow macrophage (phagocyte – black arrow) phagocytosing 3 neutrophils (white arrows) and an erythroblast (blue arrow showing the nucleus of the erythroblast).

[Abstract:0688]

RETROSPECTIVE ANALYSIS OF CLINICAL OUTCOMES AND IMMUNOTHERAPY RESPONSE IN PATIENTS WITH METASTATIC MALIGNANT MELANOMA

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Aim: Malignant melanoma, accounting for less than 5% of skin cancers, is notably deadly in advanced stages. Resistant to chemotherapy but responsive to immunotherapy due to its immunogenic nature, this study assesses clinical characteristics, survival outcomes, and side effects in metastatic malignant melanoma patients treated with immunotherapy.

Methods: This single-centre cross-sectional study at Gulhane Training and Research Hospital (January 1, 2017 - April 1, 2022) involved adults with metastatic malignant melanoma. Data on demographics, comorbidities, treatment, and survival were extracted from hospital records and verified with patients and relatives.

Results: Involving 33 patients (63.6% male, mean age 59.6), the study highlighted that 78.8% had primary lesions outside the head and neck region, predominantly presenting with advanced-stage nodular melanoma. Metastasis commonly involved the lungs (45.5%), liver (36.4%), and brain (36.4%). Nivolumab was the initial treatment for 93.9%, with 54.5% showing disease progression post-first-line therapy. The disease control rate was 45.5%, indicating significant responsiveness to treatment. The median progression-free survival was notable at 6.1 months, and the overall survival rate was 11.7 months. Hypothyroidism was a significant side effect, affecting 12.1% of patients.

Conclusions: This study corroborates the limited prognosis in metastatic malignant melanoma, with survival durations aligning with existing literature. The side effect profile was clinically manageable, and the effectiveness of immunotherapy, particularly in patients with non-head and neck primary lesions, was evident.

Keywords: *malignant melanoma, immune checkpoint inhibitors, side effect*

[Abstract:0691]

BALLOON RELEASE – WHAT HIDES BEHIND THE EUPHEMISM?

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We present a woman, 47 years old without pathological history. Admitted to the Emergency Department due to a 3-month history of asthenia, anorexia, and unquantified weight loss, accompanied by postprandial vomiting evolving for 6 days. Physical examination with tachypnoea, global decrease in breath sounds upon pulmonary auscultation, the remaining examination revealed no significant pathological findings. A supplementary study with showed type 1 respiratory insufficiency, chest radiography revealing multiple bilateral lung hypodensities in 'balloon drop' and Thoraco-abdominopelvic tomography showing 'lung lesions suggestive of metastases,' with no other pathological findings. Continued inpatient study with a cerebral CT scan, upper and lower digestive endoscopies, thyroid ultrasound, and breast ultrasound, with no pathological findings. Achieved trans-thoracic fine-needle aspiration biopsy of one of the lung lesions, with histology revealing carcinoma of undetermined origin... Referred for external Oncology consultation.

Keywords: *balloon release, neoplasy, undetermined origin*

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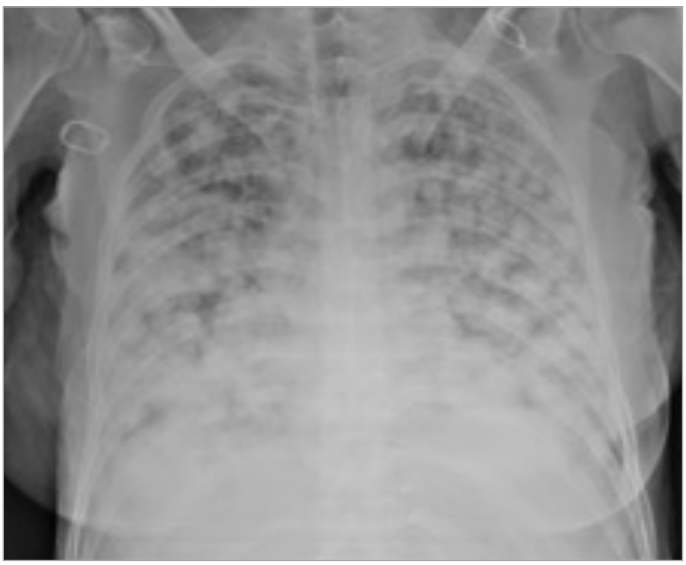

Figure 1. Chest radiography revealing multiple bilateral lung hypodensities in 'balloon drop

[Abstract:0733]

A CASE OF GASTROINTESTINAL STROMAL TUMOUR PRESENTED WITH FEVER AND ABDOMINAL PAIN

Burak Isal[1], Hamide Tokol[1], Tevhide Bilgen Ozcan[2], Ceren Gur[1], Ayca Cinar[1], Hazal Levent[1], Fatih Eren[3], Cansu Cakir Ozkul[3], Ahmet Engin Atay[1]

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Introduction: Gastrointestinal stromal tumours (GISTs) are rare mesenchymal neoplasms of the gastrointestinal tract that usually arise from the bowel wall in the stomach and small intestine. However, they may involve any portion of the gastrointestinal tract, including omentum, mesentery, and peritoneum. In this report, a case of GIST admitted with fever and abdominal pain. was presented.

Case Report: A 65-year-old female patient, who had known hypertension, peptic ulcer of stomach, coronary artery disease, and chronic renal failure, admitted to our inpatient service for further investigation and differential diagnosis of fever and abdominal pain. Her rheumatologic tests and culture antibiograms were negative. After it was reported that she had abdominal discomfort for two months, she underwent to tomographic examination which showed a 113x103 mm hypodense lesion between liver. and stomach.

Incisional biopsy of the lesion revealed DOG1 (+), CD117 (+), DESMIN (-) tumour suggesting GIST of omental region (Figure 1, 2 and 3). The patient was consulted with medical oncology, and imatinib therapy was initiated. Her fever and abdominal pain was resolved with the initiation of tyrosine kinase inhibitor medication.

Conclusions: Although patients with GIST may admit with abdominal pain, fever is a rare presenting symptom. The presence of fever indicates excessive inflammatory response that usually well responds to chemotherapy.

Keywords: *gastrointestinal tumours, fever, abdominal discomfort*

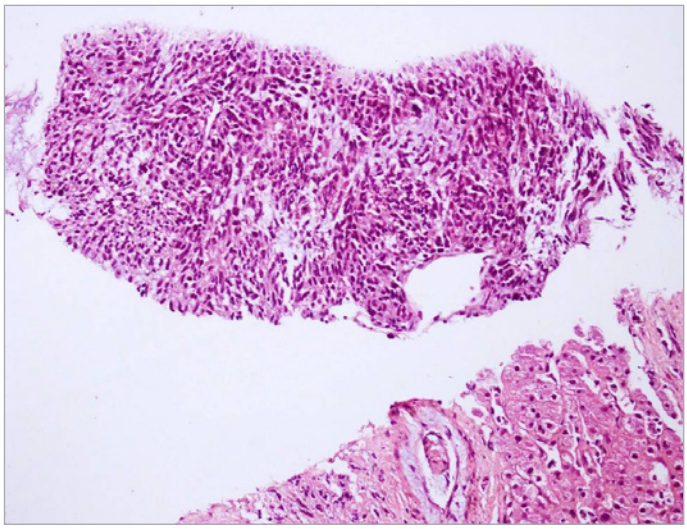

Figure 1. Tumour tissue consisting of small round formations near the heart at 10x magnification.

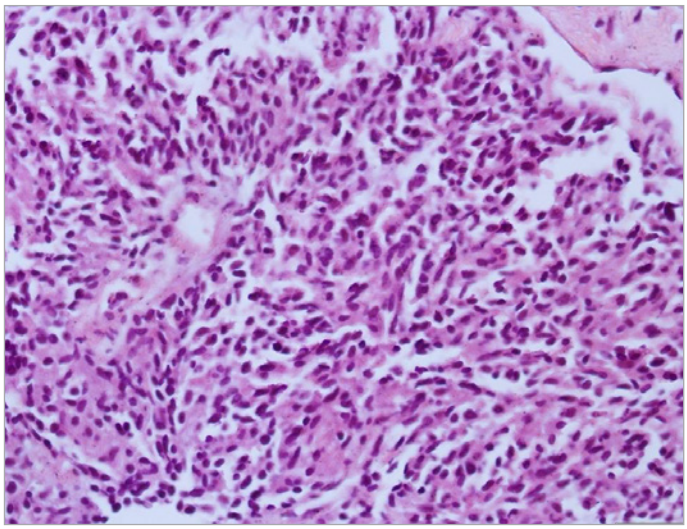

Figure 2. Monotonic appearance of tumour cells at 40x magnification.

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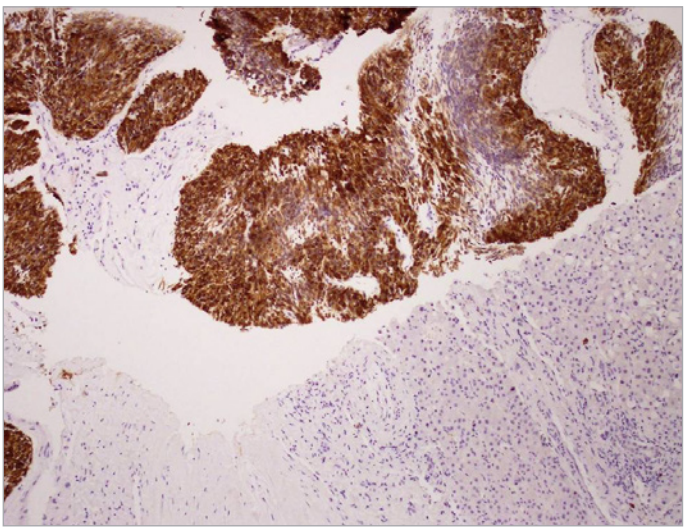

Figure 3. Cytoplasmic and membranous positive reaction with cd-117/c-kit immunohistochemical stain, which is specific for GIST.

[Abstract:0745]

THE ROLE OF IMMUNOTHERAPY IN ALL AND ITS IMPACT ON HEALTHCARE

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Purpose: Acute lymphoblastic leukaemia (ALL) is a rare but aggressive malignant cancer caused by uncontrolled proliferation of lymphoblasts which disrupt normal organ function. The risk for developing ALL is highest in children younger than 5 years of age. In this poster we will discuss how genomic medicine allows better risk stratification and early identification of certain genetic alterations.
Methods: Different immunotherapies will be reviewed, their mechanism of action, and novel upcoming therapies.
Findings: The addition of immunotherapy has improved clinical outcomes for patients, increasing overall survival and having a lower adverse events (AE) profile.
Conclusions: Immunotherapy offers a more targeted approach in ALL management. Despite high initial costs, it can prove to be cost-effective and inevitably reduce burden on a health system.

Keywords: paediatric haematology, ALL, immunotherapy

[Abstract:0747]

IDIOPATHIC THROMBOCYTOPENIA IN REPUBLIC OF KOSOVO

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Introduction: Immune thrombocytopenia is an autoimmune haematological disorder characterized by a severely decreased platelet count due to a peripheral cause: platelet destruction via antiplatelet antibodies, which may also affect marrow megakaryocytes. Patients may present in critical situations with cutaneous and/or mucous bleeding and possibly life-threatening organ haemorrhages (cerebral, digestive, etc.). Corticotherapy represents the first treatment option. Second-line therapy options include intravenous immunoglobulins, thrombopoietin receptor agonists, rituximab, or immunosuppression, but their benefit is usually temporary. The disease generally impacts young people who need repeated and prolonged treatment and hospitalization; therefore, it is preferred to choose a long-term therapy. Splenectomy represents an effective and stable treatment with a 70–80% response rate and a low incidence of complications.
Purpose: The purpose of the paper is to analyse and research the hospitalized cases of patients diagnosed with idiopathic thrombocytopenia at the Hematology Clinic of the University Clinical Centre of Kosovo in the period January 2016–December 2020.
Materials and Methods: The research is of a retrospective, descriptive type. This research includes the analysed cases from the 5-year period from January 2016 to December 2020. The textual part of the paper is written in Microsoft Word, while tables and graphs are worked on in Microsoft Excel.
Results: 191 patients with idiopathic thrombocytopenia were diagnosed in the haematology clinic. The most affected age was >60 years, or 41.88%; the female gender was attacked in 121 cases, or 61.73%. The highest incidence appeared in 2019, with 51 cases. The most affected municipality is Prishtina, with 26 cases, or 13.27%.

Keywords: Kosovo, ITP, gentian, hematology, UCCK

[Abstract:0757]

BATTLING PLATELET PARADOX: NAVIGATING THE ODYSSEY OF PRIMARY IMMUNE THROMBOCYTOPENIA IN A WOMAN'S JOURNEY

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Primary immune thrombocytopenia (ITP) stands as a challenging diagnosis, marked by the immune system's misguided assault on

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platelets. Through meticulous examination, we aim to unravel the nuances of this disorder, shedding light on diagnostic dilemmas and therapeutic approaches.

A 47-year-old woman, with a history of cutaneous lupus erythematosus and smoking, came to the Emergency Department due to metrorrhagia for 6 months, which worsened in recent weeks and cursed with lipothymia and dizziness 24 hours before. She was sweaty and pale but hemodynamically stable.

Analytically, microcytic and hypochromic anaemia with haemoglobin (Hb 2.10 g/dL) and thrombocytopenia 13000 U/L were highlighted and 4 units of plasma and erythrocyte concentrate were administered as well as ferric carboxymaltose. From the study carried out, the screening for false thrombocytopenia showed ITP diagnosis and bone biopsy with bone marrow aspirate confirmed this diagnosis and corticotherapy was initiated. Due to the persistence of thrombocytopenia (4,000 U/L) and the appearance of petechial lesions in the lower limbs, ITP refractory to corticosteroid therapy was admitted. Immunoglobulin was started with clinical improvement.

As we reflect on this case, it becomes evident that the pursuit of innovative therapies, coupled with an informed healthcare alliance is paramount in ameliorating the burden of ITP. This clinical exploration serves not only as a testament to the challenges posed by haematological disorders but also as a catalyst for continued research, fostering hope for therapeutic advancements in the realm of immune thrombocytopenia.

Keywords: *immune, thrombocytopenia, anaemia*

[Abstract:0779]

WHAT IS HIDING BEHIND MULTIPLE OSTEOLYTIC LESIONS?

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We present the case of a 73 year old man, who was admitted in hospital for chronic moderate intensity back pain which started four months before. The patient was non-smoker with a history of COPD stage 4-GOLD, pulmonary fibrosis, multinodular goitre with euthyroidism. Physical examination revealed thoracic kyphosis and pain evoked by palpation of vertebral column. The X-ray exam disclosed multiple osteolytic lesions disseminated among thoracic and lumbar vertebrae. The lab tests showed hypercalcemia (total Ca 12.2 mg/dl), low PTH (0.4 pmol/l) and mild inflammatory syndrome.

A general ultrasound exam was performed and did not find any modifications. The upper gastrointestinal-endoscopy and colonoscopy exams did not reveal any lesions. A whole-body CT-scan was performed and it confirmed the presence of osteolytic lesions, which on MRI scan were highly gadolinium enhancing. Also, the bone scintigraphy described them as metabolic active. Given the fact that we could not discover any solid cancer, an immunogram was performed and revealed low levels of immunoglobulins and light chains. We also carried out a medullary biopsy which showed 15-20% plasmacytic infiltrate. Subsequently, the patient was transferred to the Hematology Department where he received treatment with lenalidomide and bortezomib. After 2 months of treatment, the patient had an unfavourable evolution with severe pulmonary embolism and exitus.

Non-secretory myeloma has an incidence of 3-5% of the total population of multiple myeloma patients. In this case, the differential diagnosis of the osteolytic lesions was hardened by their atypical location and high suspicion of a metastatic solid cancer.

Keywords: *multiple myeloma, non-secretory, osteolytic lesions, back pain*

[Abstract:0784]

SIDESTEPPING EXPECTATIONS: A RARE PRESENTATION OF MELANOMA PROGRESSION

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Private Practise of Dermatology "Derma-Megi", Prishtina, Kosovo

Introduction: Melanoma is a malignant neoplasm arising from the uncontrolled proliferation of melanocytes, the pigment-producing cells of the epidermis. Characterized by its potential for aggressive behaviour and metastasis, melanoma commonly manifests as a pigmented lesion with variable clinical presentations. The pathological hallmark involves atypical and dysregulated melanocytic growth, often penetrating beyond the epidermal-dermal junction.

Purpose: This case aims to bring attention to a rare clinical presentation and progression of melanoma.

Methods: The methodology used in this presentation is a case study from a private dermatology practice.

Results: The case shows a 44-year-old male presenting with a vast, discoloured, irregular-shaped lesion on his RUQ of the abdomen. According to the history, the lesion showed up six years earlier, and it kept growing continually. No other significant information regarding his health or condition was expressed. Dermatoscopy showed irregular borders with slight elevation and discoloration with dark and light brown, blue, and red nuances. The lesion measured around 8 cm by 10 cm. A biopsy of the lesion was performed, and the result showed only a Breslow Grade 1 infiltration. The patient underwent surgical excision of the lesion.

Conclusions: While superficial spreading melanomas are known for their tendency to grow horizontally, growing to dimensions as wide as found in this patient while still being contained at an infiltration of Grade 1 Breslow is a pretty rare and unique sight.

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The human body keeps reminding us over and over that textbook cases should not be continually expected in clinical practice.

Keywords: *melanoma, dermato-oncology, Kosovo, superficial spreading melanoma*

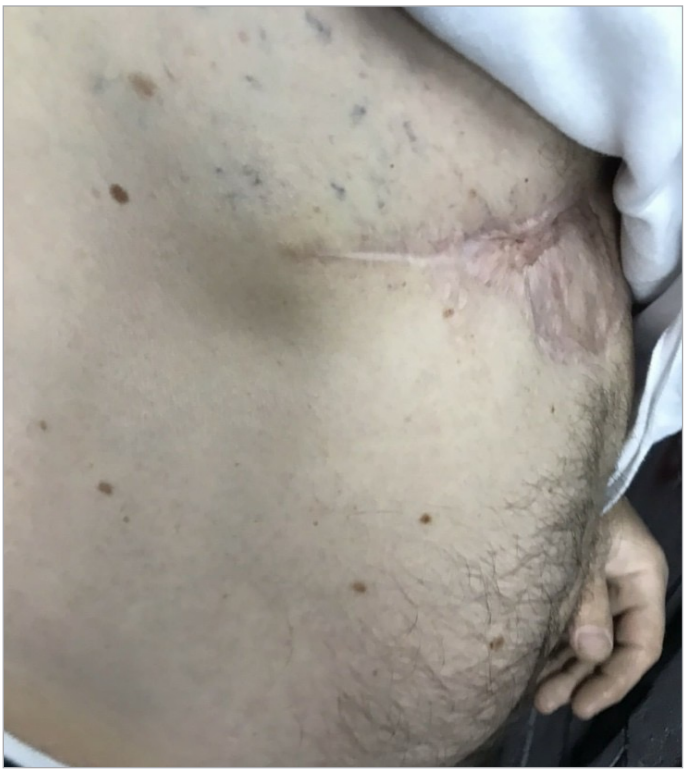

Figure 1. *After surgical treatment.*

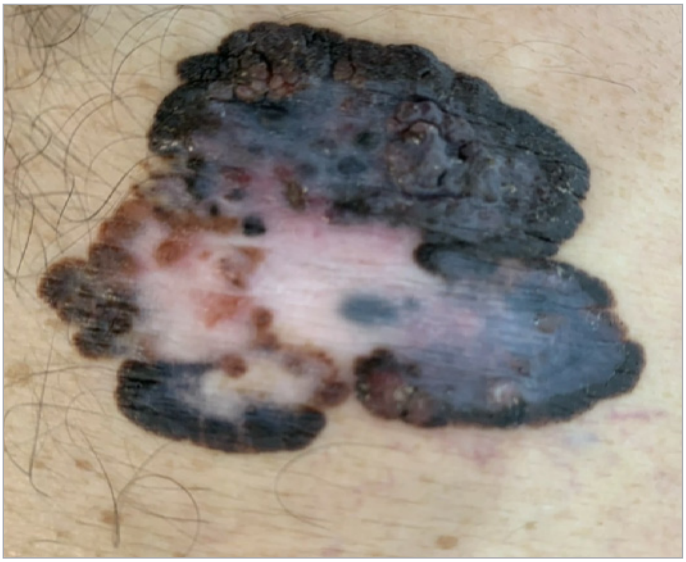

Figure 2. *Presenting lesion.*

[Abstract:0798]

SALVAGE CHEMOTHERAPY OPTION FOR PATIENTS WITH HEAVILY TREATED RELAPSED/REFRACTORY GERM CELL TUMOURS: REMEMBERING AN OLD FRIEND

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[2] Department of Medical Oncology, University of Health Sciences, Gulhane Faculty of Medicine & Gulhane Training and Research Hospital, Ankara, Turkey

Aim: Additional chemotherapy (CT) protocols are required for patients with relapsed refractory germ cell tumours (GCT) who still have good performance status but have residual tumour burden despite having received multiple lines of CT. The aim of study was to evaluate the overall survival (OS) after the ifosfomide carboplatin, etoposide(ICE)protocol. Additionally, it was desired to evaluate whether there is a difference in the survival contribution of the ICEprotocol according to the line order sn which it is used (4 or more lines vs. 3 or less lines).

Methods: In this retrospective cross-sectional study, patients with relapsed refractory GCT who had previously received multiple-line CT were evaluated. Gender, age, clinical stage at first diagnosis, serum tumours marker levels, visceral metastasis status, previous treatment protocols, response rates to ICE, follow-up times, hematologic side effects were recorded. The primary endpoint was to demonstrate OS after the ICE. The secondary endpoints is to determine whether there's a difference in OS between those who received the ICE on the fourth and subsequent lines and those who received the third and previous lines.

Results: 20 patients were included (median age 26,5; male raito 95%). StageIIIC at first diagnosis in 70%off all patients received 4 or more different systemic treatments. One of these treatment modalities includes high-dose CT and autologous stem cell transplantations. Lung and liver metastases (65%-70%) were frequently detected. The response rate was 50%. The median PFS in the whole group was 6.25 (IQR 7.98) months. Grade3 neutropenia and anaemia 45%, thrombocytopenia 40% in group.

Discussion: For heavily pre-treated relapsed/refractory GCT, the ICE has the potential to provide a significant survival.

Keywords: *germ cells cancers, ICE protocol, anaemia, neutropenia*

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[Abstract:0806]

SYNCHRONOUS MULTIPLE PRIMARY MALIGNANCIES OF THE THYROID, LUNG AND BREAST - A RARE CASE

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Purpose: When making a new cancer diagnosis, it is important to consider the possibility of multiple primary malignancies.

Methods: A 57-year-old woman with a history of hypertension, demonstrating synchronous multiple primary malignancies in the thyroid, lung and breast at Florence Nightingale Hospital. Diagnosis, treatment and post-treatment follow-up of the disease are described.

Findings: The patient presented with changes in breast shape. Following physical examination and radiologic studies, a B-RADS-5 breast lesion was detected. Subsequently, the patient underwent PET-MRI scan, revealing lesions with FDG uptake in the thyroid, lung and breast tissues. Fine-needle aspiration biopsy for the thyroid, followed by wedge resection of the middle lobe of the lung, then a breast lumpectomy with sentinel lymph node excision, were performed. Histopathology of tissue samples showed oncocytic cell neoplasia in the thyroid, neuroendocrine tumour in the lung, mucinous carcinoma metastasis in the lymph node and mixed-type invasive carcinoma in the breast (estrogen 95% positive, progesterone 70% positive, HER-2 (+2) positive, FISH negative, Ki-67: 18%). A comprehensive genetic analysis revealed an ALK fusion gene mutation in lung tissue. Three cycles of docetaxel 75 mg/m^2 and carboplatin 600 mg were administered and radiotherapy was administered for breast neoplasia. Repeat PET-MRI showed regression in all malignant tissues. The patient also received Letrozole to prevent relapse. No recurrence was detected in the patient's follow-up.

Conclusions: Newly diagnosed malignancies may co-occur with multiple tumours and advanced investigations should be conducted. Early diagnosis, especially in cases where multiple tumours are detected, is a valuable and crucial indicator guiding treatment.

Keywords: *synchronous tumours, triple primary malignancies, thyroid, lung, breast*

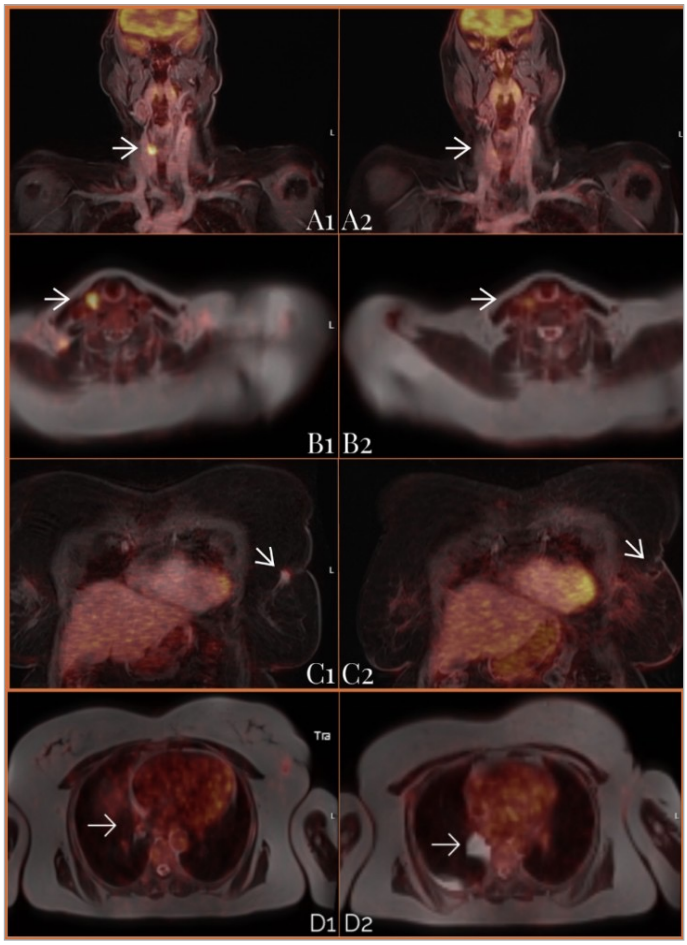

Figure 1. *Comparison of PET MRI images before and after treatment. A1, B1, FDG uptake in right thyroid tissue; A2, B2, regressed lesion post-treatment. C1, FDG uptake in the upper outer quadrant of the left breast; C2, postoperative changes. D1, FDG uptake mass with extension in the mediastinum-paraesophageal region in the medial basal segment of the right lower lobe of the lung; D2, postoperative atelectatic changes.*

[Abstract:0809]

THE RELATIONSHIP OF INFLAMMATORY PARAMETERS WITH DISEASE STAGE AT THE TIME OF DIAGNOSIS IN PATIENTS WITH BREAST CANCER

Zeynep Banu Teke, Hanife Usta Atmaca, Ozlem Yilmaz Aykent, Feray Akbas

University of Health Sciences, Istanbul Training and Research Hospital, Internal Medicine Clinic, Istanbul, Turkey

Aim: Breast cancer is the most common cancer in women globally and ranks as the second most prevalent cancer overall. Factors like diet, body weight, physical activity and inflammation are related to higher risk of breast cancer. Also inflammatory markers (P/L, N/L, L/M) are associated with worse survival rates and lymph node metastasis. Here, it was aimed to investigate the relationship of BMI and inflammatory parameters with disease stage at the time of diagnosis in patients with breast cancer.

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Methods: 68 female patients with a pathologically confirmed new diagnosis of breast cancer were included in the study. All patients were tested for hemogram (haemoglobin, trombosit, neutrophil/lymphocyte ratio (N/L), platelet/lymphocyte ratio (P/L), monocyte/lymphocyte ratio (M/L), MPV), CRP, albumin and GGT levels and albumin/GGT ratio and CRP/albumin ratio and BMI were calculated. Results were evaluated for their relationship with tumour stage at the time of diagnosis.

Results: Number of patients in each tumour stage were as: stage 1 n=6, stage 2 n=33, stage 3 n=13, stage 4 n =16. Mean age was 53.9±12.5 years and BMI was 26.2 (18.4-38.7) kg/m^2. There was no correlation between N/L, P/L, M/L, BMI, CRP, albumin, CRP/albumin and CRP/GGT and disease stage. Platelet count was lower in stage 3 when compared to early stages (stage 1-2). Data analysis of patients is shown in Table 1.

Conclusions: Our results indicate that inflammatory parameters were insufficient to predict the tumour stage at the time of diagnosis in patients with breast cancer. We conclude that further investigation into other factors is necessary in larger patient series to make such predictions.

Keywords: breast cancer, inflammation parameter, tumour stage

	Stage 1 (n=6, 8.8%) x̄±ss (min-max)	Stage 2 (n=33, 48.5%) x̄±ss (min-max)	Stage 3 (n=13, 19.1%) x̄±ss (min-max)	Stage 4 (n=16, 23.5%) x̄±ss (min-max)	G. A. Difference p	H	p*	η²
Age	50.2±2.6 (42-59)	55.1±2.5 (31-83)	56.3±3.2 (35-81)	51.0±2.7 (31-70)	0.54[b]			
Length[a]	1,61 (1,50-1,65)	1,60 (1,50-1,76)	1,63 (1,42-1,80)	1,63 (1,55-1,70)	0,34			
Weight[a]	63,0 (57-85)	70,0 (50-100)	68,0 (54-85)	69,5 (52-100)	0,70			
BMI[a]	25,2 (22,0-36,9)	28,0 (18,4-38,7)	25,6 (21,1-31,2)	26,4 (20,3-36,7)	0,57			
Diameter[a]	16,0 (2-25)	24,0 (12-42)	30,0 (13-60)	39,5 (12-60)	0,08			
PLT[a]	342,0 (282-453)	296,0 (146-441)	257,0 (131-423)	282,0 (84-634)	**0,04**	8,510	E1>E3 E2>E3	0,127
HGB	11.5±0.5 (10,2-13,0)	13.1±0.3 (9,1-15,9)	12.6±0.2 (10,8-14,3)	12.3±0.4 (9,3-14,8)	0.09[B]			
NEU[a]	4,7 (3,5-8,2)	4,4 (2,3-6,8)	5,7 (2,0-17,0)	4,8 (2,6-16,4)	0,44			
LYMPH	2.30±0.5 (1,37-4,30)	2.20±0.1 (1,33-3,24)	2.00±0.1 (1,36-2,71)	2.1±0.2 (1,09-3,23)	0.72[b]			
MONO	0.51±0.1 (0,29-1,07)	0.42±0.0 (0,16-0,72)	0.50±0.1 (0,24-1,12)	0.52±0.0 (0,21-0,90)	0.20[b]			
N/L[a]	2,34 (1,92-3,47)	2,24 (1,00-3,64)	2,41 (1,26-10,70)	2,39 (1,31-6,60)	0,32			
P/L	191.3±13.1 (150,3-225,7)	139.5±7.5 (73,0-226,1)	144.3±18.6 (84,0-266,0)	157.7±15.3 (102,2-219,0)	0.36[b]			
M/L[a]	0,20 (0,16-0,34)	0,18 (0,11-0,41)	0,24 (0,15-0,70)	0,22 (0,16-0,50)	0,15			
ALB[a]	43,6 (39,0-47,1)	43,1 (30,3-50,1)	44,5 (36,3-49,0)	45,5 (26,5-47,4)	1,00			
CRP[a]	1,97 (0,40-48,50)	3,87 (0,55-290,1)	5,00 (0,27-105,5)	5,36 (0,03-57,0)	0,88			
GGT[a]	14,5 (10,0-30,0)	23,0 (8,0-48,0)	14,0 (9,0-154,0)	23,0 (7,0-1456,0)	0,27			
CRP/ALB[a]	0,04 (0,01-0,06)	0,08 (0,01-9,57)	0,11 (0,01-2,59)	0,12 (0,00-1,52)	0,72			
ALB/GGT[a]	3,14 (1,52-4,36)	2,03 (0,90-5,39)	2,89 (0,25-5,09)	1,48 (0,02-6,77)	0,34			

n=number of participants, p: significance, **p***: significance after bonferonny correction [number of groups*(number of groups-1)/2] <0.017, x̄±ss: mean±standard deviation, H: Kruskal Wallis H Test statistic, η²: Kruskal Wallis H Test Effect Size (χ²/(n-1)), **G.A. Difference**: difference between groups, a: median (min-max), :
[b]: One Way ANOVA, **BMI:** Body Mass Index

Table 1. *Data analysis of patients.*

[Abstract:0817]

NOT EVERYTHING IS COVID-19

Alejandra Restrepo Ochoa[1], *María Pilar Iranzo Alcolea*[1], *Silvia Molés Caparrós*[2], *Carmen Ariño Palao*[2], *Daniel Useros Braña*[1]

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A 53-year-old man with a bicuspid aortic valve, clonal B lymphocytosis, and chronic lymphatic leukaemia (CLL) progression not requiring therapy. He was admitted after two months of fever and weight loss. The examination revealed that the basal oxygen saturation was 98% and that there were bilateral dry crackles. The analysis revealed a white blood cell count of 9,500/l, with lymphocytes at 5,370/l. CT scan showed bilateral ground-glass infiltrates as well as a positive SARS-CoV-2 PCR.

The study was completed with sputum culture with isolation of Moraxella catarrhalis successfully treated with moxifloxacin, other tests, such as fungi and mycobacteria culture in sputum, blood cultures, urine cultures, *S. pneumoniae*, and Legionella antigens, beta-glucan and galactomannan, and TBC PCR, were negative. Other serologies, as well as all autoantibodies (including ANCAs), were also negative.

Bronchoalveolar lavage (BAL) resulted in negative microorganism cultures and PCR but showed lymphocytosis. A transbronchial biopsy was performed, but it was insufficient to make the diagnosis. Finally, he required a lung cryobiopsy with the diagnosis of parenchymal infiltration related to his leukemic process (CLL).

Discussion: CLL is the most common kind of leukaemia, and pulmonary involvement can be found in up to 40% of autopsies, even though the diagnosis is uncommon in living individuals. It is characterized by nonspecific symptoms and radiological signs that are like those seen in other illnesses (pulmonary oedema, infections). A biopsy is required to rule out other disorders and to confirm it.

Keywords: chronic lymphatic leukaemia, pulmonary infiltration, cryobiopsy

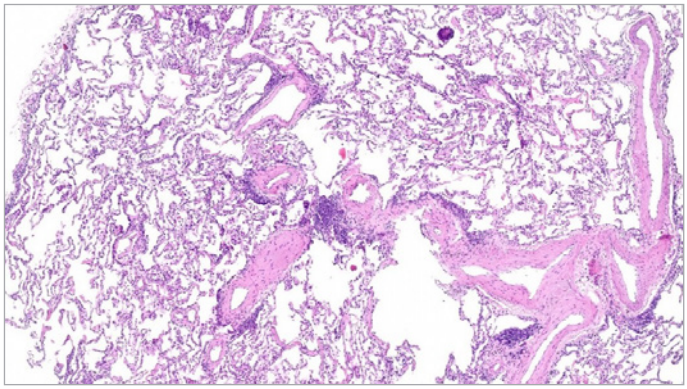

Figure 1. *Cryobiopsy shows preserved lung architecture, with aggregates of lymphocytes with a lymphangitic distribution around vascular structures.*

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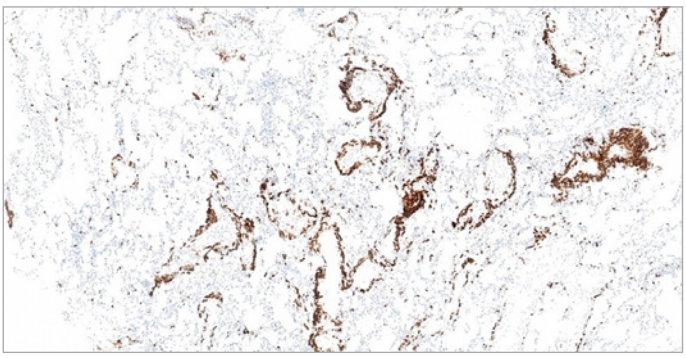

Figure 2. The immunohistochemical study demonstrates that the lymphoid cellularity is CD20+ (image) with co-expression of CD23, being compatible with infiltration by the patient's chronic lymphatic leukaemia.

[Abstract:0822]

DURABLE RESPONSE WITH CRIZOTINIB IN ROS1 FUSION-POSITIVE BLADDER CANCER WITH BRAIN METASTASES

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The ROS1 fusion represents a druggable target across several malignancies including non-small cell lung cancer. However, ROS1 fusion in bladder cancer is rare, and its treatment outcomes are unknown. Herein, we present the first case of a patient with metastatic ROS1 fusion-positive bladder cancer who showed a long-term response to crizotinib. A 40-year-old woman visited our hospital, complaining of dysuria and dyspepsia that had lasted for 2 months. Abdomen and pelvis CT scan showed a 6.8 cm enhancing mass in the bladder with multiple lymph nodes and bone metastases. Chest CT and brain MRI showed multiple lung and brain metastases, and serum CEA was elevated to 115 ng/mL. Transurethral resection of the bladder was performed and pathology revealed invasive urothelial carcinoma. After two weeks of whole brain radiation therapy, she received two cycles of chemotherapy with gemcitabine and carboplatin. Follow-up CT scan showed no change of tumour burden. The result of Next-generation sequencing performed at the time of diagnosis was CD74-ROS1 fusion. She started on crizotinib (250 mg, orally, once daily), a ROS1, ALK, and MET tyrosine kinase inhibitor, as a second-line treatment. Follow-up CT taken 4 months after treatment with crizotinib showed a reduction in tumour burden in the lungs, LNs and brain, with a partial response (Figure 1). Serum CEA also decreased to 1.5 ng/mL (Figure 2). She remained progression-free for 16 months, until brain MRI showed progression of brain metastases. Crizotinib was a well-tolerated treatment with a durable response of 16 months. Comprehensive genomic analysis should be actively accompanied to find potential molecular targets.

Keywords: *ROS1 fusion, bladder cancer, brain metastases, crizotinib*

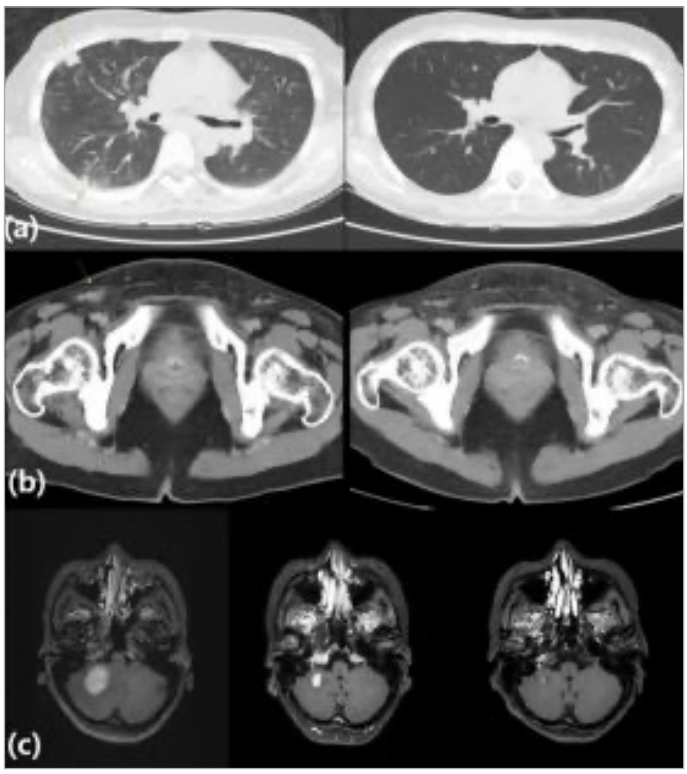

***Figure 1.** Response to crizotinib treatment.*
Four months of crizotinib treatment revealed decreased tumour burden in lung(a), LNs(b), brain(c).

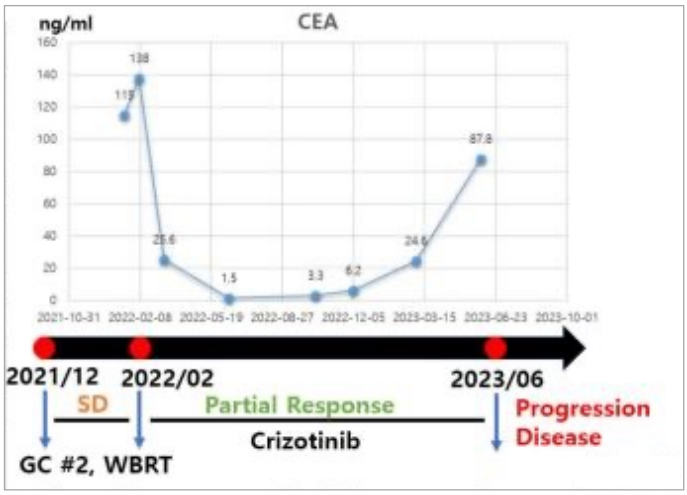

***Figure 2.** Change of CEA during crizotinib treatment.*
Crizotinib demonstrated durable response in ROS1 fusion positive metastatic bladder cancer, and serum CEA significantly declined after crizotinib treatment

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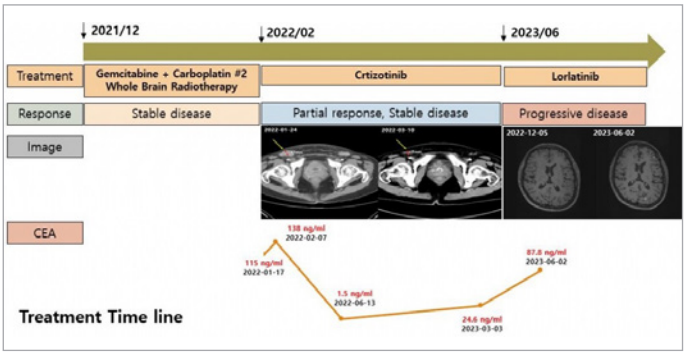

Figure 3. Time line of Crizotinib treatment.
Crizotinib was a well-tolerated treatment with a durable response of 16 months.

[Abstract:0828]

AN UNTREATED CARCINOMA OF UNKNOWN PRIMARY WITH AN ADDITIONAL BAD PROGNOSIS DUE TO THE DOWN'S SYNDROME

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Purpose: A 33-year-old woman with Down's Syndrome admitted with lumbago which was, later on, associated with a metastatic carcinoma but without an identifiable primary, despite the diverse diagnostic techniques, including repeated biopsies. Since there was no primary, no curative treatment but palliative care was left as the only option. This case aims to emphasize the burden and bad prognosis of Carcinoma of Unknown Primary (CUP), along with a worse clinical outcome in case of Down's Syndrome.

Methods: In search of possible primary sites of the metastases, diverse biochemical, imaging and pathological diagnostic techniques were used.

Findings: After the diagnosis of the lumbar mass, from which a malignancy was held responsible, the intense search of the primary was begun. In the light of the PET-CT findings, all the FDG uptake sites were evaluated for biopsy possibilities. From the least invasive one to the least favourable, repeated biopsies were done but no conclusive and properly diagnostic evaluation except patchy squamous differentiation could be made. Every opportunity was tried but the options ran out quickly because of the underlying comorbidities secondary to Down's Syndrome. Finally, palliative care was left as the only option.

Discussion: CUP is a real diagnostic and therapeutic challenge in the field of cancer and comorbidities, as it was in our case with the Down's Syndrome, can obstruct the ways of further evaluation in search of a primary. We've got so much more to learn about CUPs and post-mortem evaluations in suitable cases may enlighten the way to this goal.

Keywords: *unknown primary, Down's syndrome, carcinoma*

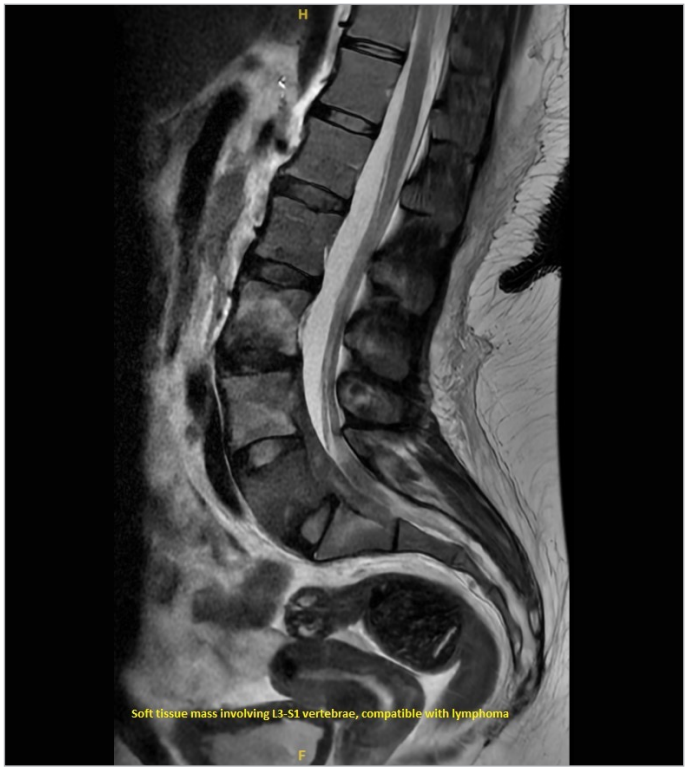

Figure 1. Spinal MRI - Soft tissue mass filling the epidural gap throughout the L3-S1 vertebrae, obliterating neural foramina.
With her symptoms of nonproductive cough, night sweats and unintentional weight loss (10% in the last six months), her lumbar mass was suspected to be spinal lymphoma.

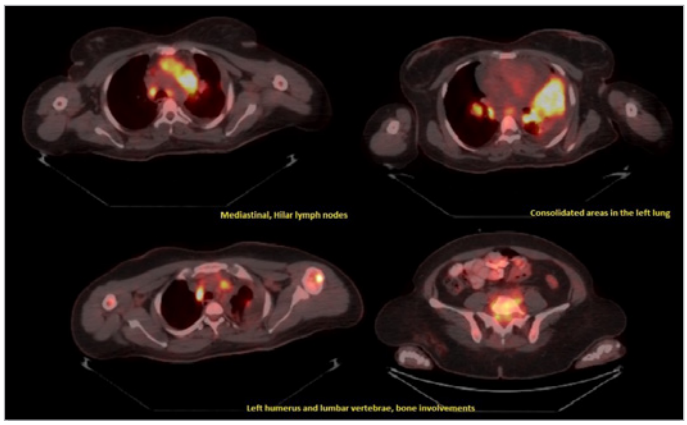

Figure 2. PET-CT imaging - Mediastinal, hilar lymph nodes. Consolidated areas of the lung. Bone involvement.
The imaging demonstrated mediastinal, hilar, abdominopelvic lymph nodes as well as pleural and bone involvements, pleural and pericardial effusions; strengthening the possibility of lymphoma. Also guided us to decide the biopsy sites.

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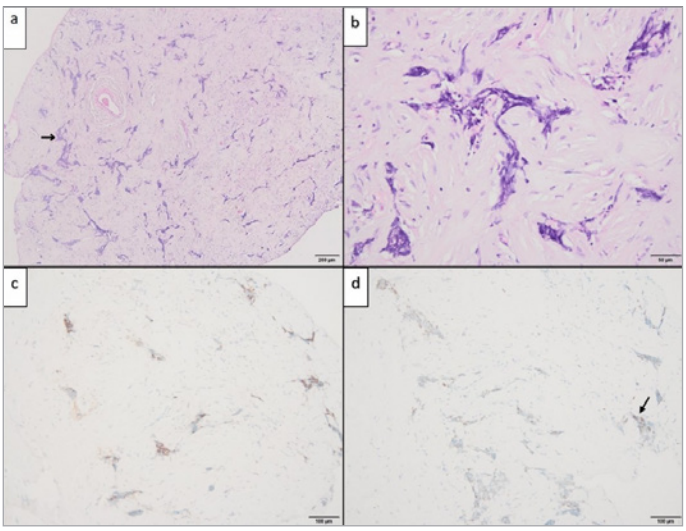

Figure 3. Lumbosacral Mass excisional biopsy - Malign group of cells (arrow) infiltrating the dense stroma (H&E) (a and b). Immunohistochemically pan-keratin (AE1/AE3) is membranous positive (c), p40 is focally positive (arrow) (d).

Biopsy from her lumbosacral mass was the closest we could have reached to a diagnosis. Nevertheless, it was nondiagnostic except the finding of a squamous origin.

	Result	Reference Interval
Haemoglobin	11.9 g/dL	11.9-14.6
Leukocytes	5 240 cells/µL	4 500-11 000
Platelets	619 000/ µL	150 000-450 000
Beta-2 Microglobulin	2798 ng/mL	609-2366
C-Reactive Protein	30.9 mg/L	<5
Erythrocyte Sedimentation Rate	77 mm/hour	0-25
Tuberculosis Culture from sputum	Negative	

Table 1. Laboratory Data on Admission.

[Abstract:0835]

ASSESSMENT OF SARCOPENIA WITH CT/ PET-CT AND EXAMINING ITS SIGNIFICANCE FOR PROGNOSIS IN PATIENTS RECEIVING AUTOLOGOUS HEMATOPOIETIC STEM CELL TRANSPLANTATION

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Background and Aims: The purpose of this study was to investigate the prevalence of sarcopenia using pre-transplant abdominal computed tomography/positron emission tomography in patients undergoing autologous transplantation who had solid tumour or haematological malignancies as well as to assess the association between sarcopenia and prognosis retrospectively.

Methods: A total of 139 patients, aged ≥18 years, who underwent autologous transplantation, had abdominal CT or PET-CT including the lumbar 3rd vertebra (L3) level before transplantation were included in the study.

Results: 121 (87.1%) of the patients had haematological malignancy and 18 (12.9%) had solid tumour. 101 patients (72.7%) were in advanced stage at diagnosis, 38 patients (27.3%) were in early stage. The presence of advanced stage cancer at the time of diagnosis increased the risk of developing sarcopenia (p=0.002) and an increase in body mass index was protective against sarcopenia (p=0.006). The presence of sarcopenia before transplantation was not found to be associated with overall survival in the entire cohort (p =0.139); however, the presence of pre-transplant sarcopenia in male patients was associated with shorter overall survival (p=0.043).Pre-transplant sarcopenia (p=0.015),presence of solid tumour (p=0.002) and history of intensive care unit stay during follow-up (p=0.001) was found to be independently associated with shorter progression-free survival in the entire cohort. Pre-transplant sarcopenia (p=0.036) and hypoalbuminemia (p=0.011) were found to increase the risk of septic shock-related death.

Conclusions: Sarcopenia before autologous transplantation is an important factor that shortens progression-free survival, increases the risk of death related to septic shock and affects prognosis. Evaluating the presence of sarcopenia in pre-transplant imaging may help in clinical decision-making and predicting transplant prognosis.

Keywords: *sarcopenia, autologous stem cell transplantation, prognosis*

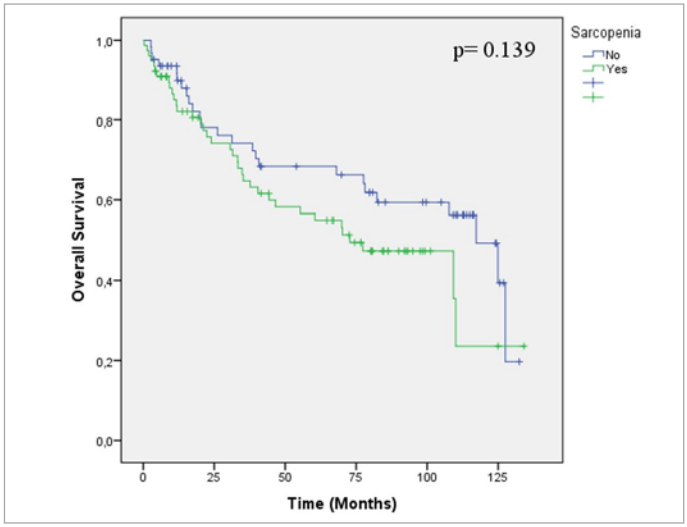

Figure 1. Kaplan-Meier plot of overall survival by pretransplant sarcopenia status.

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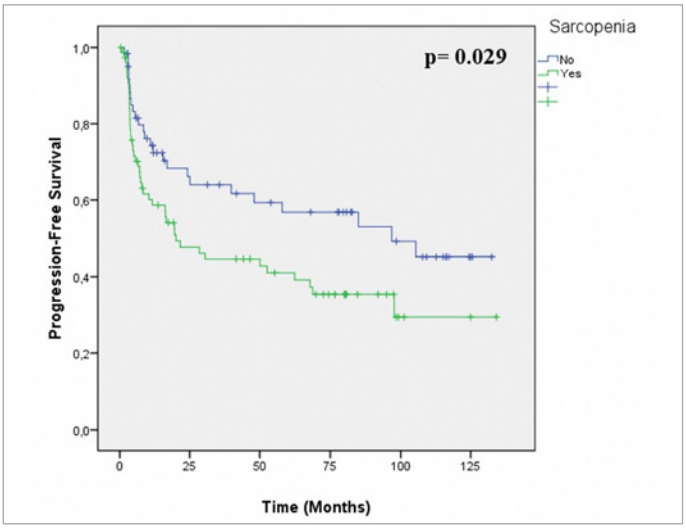

Figure 2. Kaplan-Meier plot of progression-free survival by pretransplant sarcopenia status.

	Univariate Analysis			Multivariate Analysis		
	HR	%95 CI	p	HR	%95 CI	p
Age	0,995	(0,977-1,013)	0,581			
P.T. Sarcopenia	1,479	(0,877- 2,494)	0,139*			
Male sex	1,625	(0,892-2,963)	0,113*			
Solid Tumor	2,546	(1,281-5,060)	**0,008***	2,425	(1,123-5,235)	**0,024**
Advanced Disease	1,358	(0,756-2,438)	0,306*			
>3 Cycles Chemotherapy	0,915	(0,496-1,691)	0,778			
P.T. Progressive Disease	1,635	(0,801-3,335)	0,177			
High FPG	1,544	(0,847-2,813)	0,156			
High ESR	1,722	(1,037-2,858)	**0,034***			
High CRP	1,671	(0,982-2,841)	0,056*			
High PRC	2,815	(1,432-5,533)	**0,002***	2,557	(1,272-5,138)	**0,008**
Normal Phosphorus	1,420	(0,547-3,684)	0,471			
Low Calcium	1,295	(0,773-2,167)	0,326			
Low Albumin	2,673	(1,459-4,889)	**0,001***	4,342	(2,085-9,040)	**<0,001**
P.T. AKI	1,171	(0,556-2,469)	0,678			
>21 Days of Hospitalization	1,529	(0,884-2,644)	0,129*			
FEN During Hospitalization	1,826	(1,052-3,168)	**0,032***	2,941,	(1,364-6,341)	**0,006**
ICU Admission	6,889	(4,055-11,703)	**<0,001***	12,084	(6,041-24,174)	**<0,001**

(*: Included in multivariate analysis)

Table 1. Cox regression analysis for overall survival.
HR: Hazard Ratio CI: Confidence Interval P.T: Pre-Transplant AKI: Acute Kidnet Injury PRC: Procalcitonin CRP: C-Reactive Protein ESR: Erythrocyte Sedimentation Rate FPG: Fasting Plasma Glucose FEN: Febril Neutropenia ICU: Intensive Care Unit.

	Univariate Analysis			Multivariate Analysis		
	HR	%95 CI	p	HR	%95 CI	p
Age	0,988	(0,972-1,004)	0,138			
P.T. Sarcopenia	1,707	(1,049- 2,779)	**0,029***	1,848	1,127-3,029	**0,015**
Female Sex	1,045	(0,635-1,720)	0,862			
Solid Tumor	2,384	(1,273-4,463)	**0,007***	2,732	1,434-5,205	**0,002**
Advanced Disease	1,097	(0,648-1,856)	0,731*			
>3 Cycles Chemotherapy	0,864	(0,480-1,553)	0,624			
Non-progressive disease	1,152	(0,499-2,661)	0,735			
High ESR	1,161	(0,726-1,882)	0,521			
High CRP	0,916	(0,551-1,523)	0,735			
Normal Phosphorus	1,087	(0,470-2,551)	0,846			
Low Calcium	0,876	(0,544-1,412)	0,588			
Low Albumin	1,419	(0,726-2,776)	0,306			
P.T AKI	1,148	0,588-2,241)	0,687			
>21 Days of Hospitalization	1,529	(0,884-2,644)	0,535			
FEN During Hospitalization	1,176	(0,704-1,966)	0,322			
ICU Admission	2,445	(1,442-4,143)	**0,001***	2,457	1,446-4,175	**0,001**

(*: Included in multivariate analysis)

Table 2. Cox regression analysis for progression-free survival.
HR: Hazard Ratio CI: Confidence Interval P.T: Pre-Transplant AKI: Acute Kidnet Injury PRC: Procalcitonin CRP: C-Reactive Protein ESR: Erythrocyte Sedimentation Rate FEN: Febril Neutropenia ICU: Intensive Care Unit.

[Abstract:0847]

IDIOPATHIC HYPEREOSINOPHILIC SYNDROME PRESENTING WITH PULMONARY INVOLVEMENT

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Absolute eosinophil count of 1500 cells/µl over 1 month and/or >20% in bone marrow eosinophil ratio and/or documentation of eosinophil infiltration in tissue is defined as hypereosinophilia. Infections, drugs, allergy, collagen tissue diseases and adrenal insufficiency should be considered in the differential diagnosis. Patients in whom these diagnoses are excluded should be investigated for hypereosinophilic syndrome (HES). According to the underlying aetiology, HES is divided into primary, secondary and idiopathic. In our case, Idiopatic HES with pulmonary involvement will be presented.

A 65-year-old male patient was admitted to our centre with the complaint of increasing dyspnoea for a week. There was no known and followed chronic disease in the patient's history. It was learned that he had a 40 pack-years smoking history and was engaged in farming. Thorax CT imaging was performed with the current complaints of the patient, Thorax CT was showed that both lung parenchyma had honeycomb appearance, and the lower lobes of lungs had more.

In laboratory findings, WBC: 165000, neu: 121000, eos: 38000, monocytes: 1600, Lymphocytes: 3800 LDH: 940. In peripheral blood smear, eosinophil rate was 78% and no atypical cells were observed. Bone marrow biopsy performed and PDGFRa, FIP1L1

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and JAK2 mutations were sent. Genetic analysis revealed bcr - abl1 PCR: negative, FIP1L1 - PDGFRa: negative. Eosinophil in peripheral blood flow cytometry sample rate was 76% and no blastic cell increase was detected. The patient was evaluated by the Pathology Clinic moreover lymphoblastic cells were not observed. In conclusion the patient was evaluated as Idiopathic HES.

Keywords: *eosinophilia, hypereosinophilic syndrome, PDGFRa*

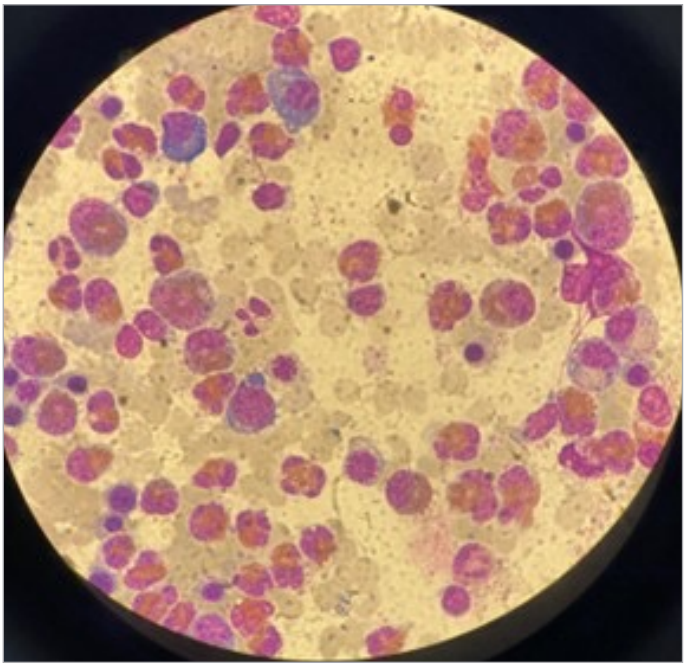

Figure 1. *Bone marrow image.*
Eosinophils and myeloid progenitors i.

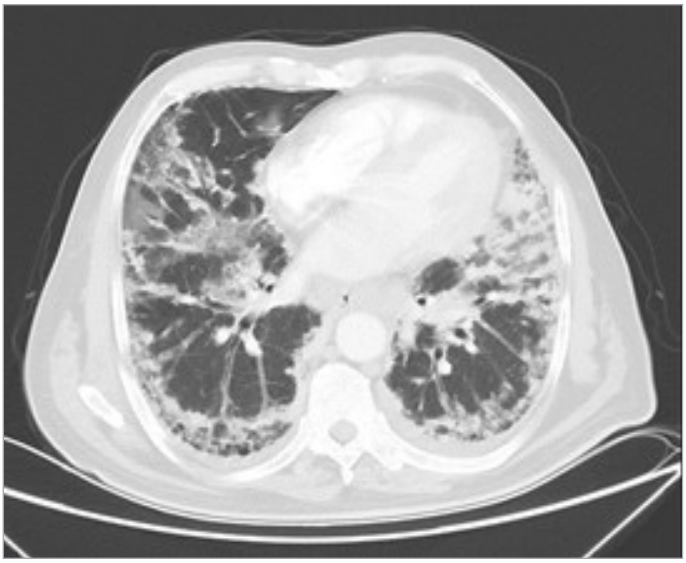

Figure 2. *Thorax CT images.*
Honeycomb appearance and traction bronchiectasis are showed in Thorax CT.

[Abstract:0852]

DYSERYTHROPOIETIC ANAEMIA TYPE 1: A RARE ETIOLOGY OF ANAEMIA

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Congenital dyserythropoietic anaemias (CDAs) are characterized by ineffective erythropoiesis and distinctive erythroblast abnormalities. It is characterized by moderate-to-severe macrocytic anaemia presenting occasionally in utero as severe anaemia associated with hydrops fetalis but also in adulthood. Usually they have lifelong moderate anaemia accompanied by jaundice and splenomegaly. Secondary hemochromatosis develops with age as a result of increased iron absorption even in those who are not transfused.

We describe a case of a 75-year-old woman, who presented to an internal medicine consultation with a normocytic normochromic anaemia, since age of 35, with need for transfusions during pregnancy, haemoglobin 9~10 g/dL, hyperferritinemia associated and splenomegaly. An extended study was performed, namely: endoscopic studies with no changes, no vitamin deficiencies, normal thyroid function, increased reticulocyte count (2.4%), Increased ferritin - ~1000 ng/mL, St transferrin 26%, and normal peripheral blood smear. An abdominal and cardiac MRI were also performed which documented splenomegaly, hepatic and splenic iron overload without cardiac overload. Myelogram and bone marrow aspirate were added to the study, which revealed no changes. An NGS panel of haemolytic anaemias detected CDAN1(NM_138477.4) c.3674_3675insT variant in heterozygote. Pathogenic variants in the CDAN1 gene are associated with type 1 deserythropoietic anaemia, with autosomal recessive transmission. CDA type I is a rare disease with only few cases well described in the world literature.

The diagnosis is often missed or delayed due to significant phenotypic heterogeneity.

Keywords: *congenital dyserythropoietic anaemias, rare anaemia, secondary hemochromatosis*

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[Abstract:0859]

OVERLAP BETWEEN ONE OF MULTIPL MYELOM AND ONE OF SYSTEMIC LUPUS ERYTHEMATOSUS: KIKUCHI FUJIMOTO DISEASE (KFH): THE GREAT OVERLAPPER

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Introduction: Kikuchi-Fujimoto disease is a very rare disease characterized by cervical lymphadenopathies. CFD can mimic some malignancies or occur together as an overlap. We prepared a case report explaining the overlapping occurrence of Kikuchi Fujimoto disease (CFD) in two patients with lupus and multiple myeloma.

Case 1: A 32-year-old female patient presented with a complaint of high fever, occasionally reaching 38 degrees, a loss of 7 kilos, and a painful, palpable swelling on the right side of the neck. Several soft, mobile lymphadenopathies were detected in the left cervical region, the largest of which was 3 cm in size. Lytic bone lesions were seen on PET/CT. Infections and romatologic biochemistry examination and were found negative. As a result of bone marrow biopsy, IgG kappa multiple myeloma was found. Excisional lymph node biopsy performed to rule out lymphoid malignancy. As a result of histopathological and immunohistochemical examination of the biopsy, histiocytic necrotizing lymphadenitis was diagnosed. VRD regimen was planned and the first dose of Bortezomib was administered.

Case 2: A 35-year-old female patient presented to the outpatient clinic with neck swelling. At same time, when a hyperemic lesion was detected around the root of the nose and skin BX was taken. Hyperemic lesion biopsy results histopathological findings suggest lupus erythematosum in the foreground of clinical diagnoses. Excisional lap biopsy was clarifying Kikuchi Fujimoto disease. The anti-sm and anti-ribosomal p were seen positive and patient considered lupus.

Discussion: Although Kikuchi Fujimoto disease is self-limiting condition is the great mimicker and great overlapper.

Keywords: *overlapping, Kikuchi fujimoto disease, lupus*

[Abstract:0861]

A VERY UNIQUE SYNDROME: SHOULD WE INVESTIGATE FOR OTOIMMUNITY IN A PATIENT PRESENTING WITH FACIAL PARALYSIS? MELKERSSON-ROSENTHAL SYNDROME

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Melkersen-Rozenthal syndrome is neuro-mucocutaneous otoimmun disease characterized by the triad of recurrent peripheral facial paralysis, orofacial oedema and fissured tongue. In the presence of one or two of the findings, the presence of granulamotous cheilitis must be demonstrated by performing a skin biopsy of the facial oedema for diagnosis. Treatment is steroids, non-steroidal anti-inflammatory drugs and antibiotics can be used as medical treatment. Melkersson-Rosenthal syndrome is a disease that should be considered in the differential diagnosis of recurrent facial paralysis. The patient, who has had complaints of fever and swelling on his face for about 20 years and was diagnosed with Melkersson syndrome 5 years ago, has had trouble sleeping for about 2 months, his sleep was disturbed by the swelling of his face and the feeling of fever, he could not fall asleep or stay asleep, he did not describe any obvious depressive complaints, but he was restless due to the swelling of his face. Here, it will be discussed whether autoimmunity should be investigated in which cases with facial paralysis in a patient presenting with facial paralysis and edema, due to both the tendency of Merkelson-Rotendhal syndrome to be associated with autoimmune diseases such as Chron sarcoidosis and the inherent autoimmunity.

Keywords: *Melkersson-Rosenthal, rosenthal, facial paralysis*

[Abstract:0872]

A CASE OF LONG-COURSE GASTRIC CANCER PRESENTING WITH BONE MARROW METASTASIS

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Purpose: A 64-year-old woman with a history of type 2 diabetes mellitus and gastric adenocancer admitted with

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cutaneous ecchymoses after a 10-years-of-remission. Bone marrow metastases were identified, indicating relapsed disease. Although the expected survival was much lower than this patient experienced, unfortunately, the years without a proper medical follow up, had no mercy and resulted in bad prognosis.

Methods: Possible causes of ecchymoses, bicytopenia were gone over with biochemical tests, radiological and pathological methods.

Findings: In the etiological examination of ecchymoses, a complete blood count analysis revealed anaemia, thrombocytopenia which were attributed to bone marrow failure due to the metastasis of relapsed gastric adenocancer.

Conclusions: After a 10-year-of remission, which is highly extraordinary and long for gastric cancers, because the follow up visits were not done properly, the relapse could only be realized when the disseminated disease metastasized to bone marrow causing bicytopenia and spontaneous ecchymoses throughout the body. In solid organ malignancies, especially the aggressive ones like gastric cancers, despite the expected short survival, every once in a while there can be longer survivors. Also, many morbid and mortal endpoints can be prevented or postponed with regular follow-ups. Besides, although it is a very rare entity, bone marrow metastases should be considered in the differential diagnosis of cytopenias, especially in patients with history of malignancies.

Keywords: *gastric adenocancer, bone marrow, metastasis*

	Result	Reference range
Hemoglobin	10,4 g/dL	12-16
MCV	91,4 fL	80-100
Platelet	44 000 hücre/ml	150 000-450 000
Leukocyte	11 900/micL	4 500-11 000
Reticulocyte Count	%2,5	0,6-2,6
Ferritin	302 microgram/L	11-307
Folic Acid	12,03 microgram/L	3,1-19,9
Vitamin B12	308 ng/L	126-590

Table 1. *Biochemical investigations.*

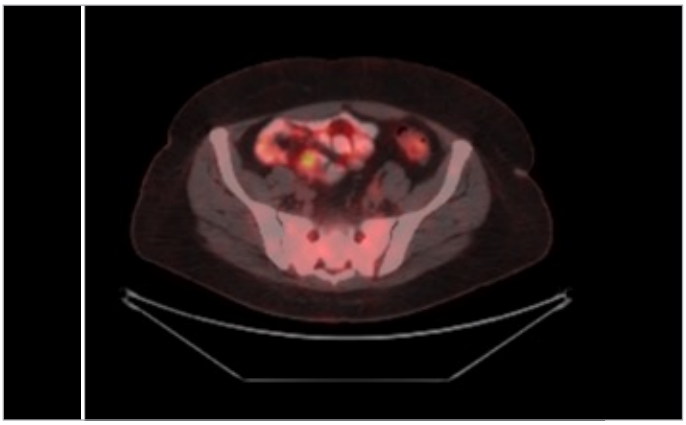

Figure 1. *The recurrence disease areas in PET-CT, sacral metastases.*

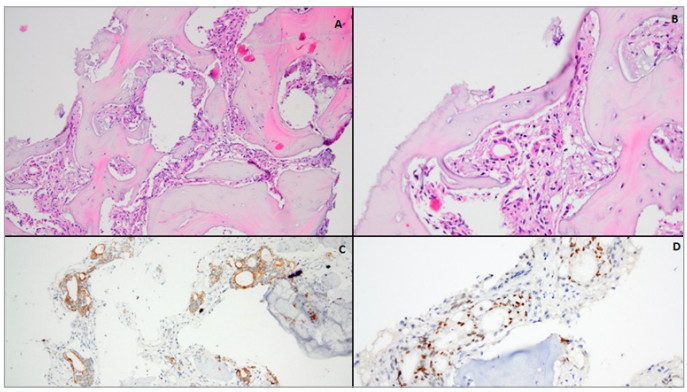

Figure 2. *The observed Cam 5.2 and CDX2 positive stains in bone marrow biopsy examination.*
Low power magnification demonstrating diffuse infiltration of marrow space (A, hematoxylin-eosin stain), in which adenoid structures can be discerned at high power (B, hematoxylin-eosin stain). Immunohistochemistry showing CAM5.2 (C) and CDX-2 (D) positivity. Cam 5.2 can be used for detecting micrometastases of gastric adenocarcinoma, while CDX2 is used in identifying intestinal metaplasia, considered a precursor to gastric adenocarcinoma.

1-	12 cycles of FOLFOX chemotherapy
	Stable course
2-	8 cycles of capecitabine + 3 cycles of FOLFIRI
	Progression
3-	5 fractions of 25 Gy radiation therapy for the C5 vertebra + 5 fractions of 30 Gy radiation therapy for the sacrum
4-	13 cycles of FOLFIRI
	Progression
5-	5 fractions of 500 Gy radiation therapy for the bilateral shoulders + 5 fractions of 400 Gy radiation therapy for the femoral head
6-	2 cycles of FOLFOX
7-	Pain palliation + Nutritional support

Table 2. *The treatments applied for recurrent disease, in chronological order.*

[Abstract:0884]

RAPID DISEASE PROGRESSION IN RENAL CELL CARCINOMA FOLLOWING SURGERIES: CYTOREDUCTIVE NEPHRECTOMY AND METASTASECTOMY

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Case Description: Two cases of middle-aged men with metastatic renal cell carcinoma (mRCC) who underwent surgical interventions as part of their oncological management. Patient A underwent a cytoreductive nephrectomy (CN) and Patient B underwent 2 metastasectomies for lung metastases. Both developed significant disease progression within 2 months and commenced systemic therapies. Patient A recommenced cabozantinib, a tyrosine kinase inhibitor (TKI) and Patient B commenced immune

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checkpoint inhibitors (ICI), Ipilimumab and Nivolumab. Patient A died secondary to his malignancy while Patient B continues with his immunotherapy.

Clinical Hypothesis: Progression of Renal Cell Carcinoma

Diagnostic Pathways: Initial diagnoses were confirmed via biopsy and nephrectomy for Patients A and B, respectively. Both patients' disease status was monitored using staging computed tomography of the thorax, abdomen and pelvis.

Discussion and Learning Points: RCCs encompass over 85% of all kidney primary malignancies, with the most common histological subtype being clear cell (Zhuang et al., 2022). Tools for aiding treatment decisions include the Memorial Sloan-Kettering Cancer Center (MSKCC) score. CARMENA and SURTIME trials suggested that Sunitinib with or without CN provides similar progression-free rates. However, available retrospective data supports the utilization of CN in conjunction with ICI. Furthermore, there are ongoing randomized control trials assessing overall survival in synchronous mRCC patients receiving initial ICI followed by CN vs continued ICI. Although surgery remains a key management option for mRCC, in conjunction with medical therapies, it is not without its risks, particularly the phenomenon of rapid disease progression postoperatively.

Keywords: *clear cell renal cell carcinoma, cytoreductive nephrectomy, metastasectomy, tyrosine kinase inhibitors, immune checkpoint inhibitors*

[Abstract:0927]

OCCLUSION OF PEDAL ARTERY REVEALING A MYELOPROLIFERATIVE SYNDROME WITH A POSITIVE JAK2 MUTATION: A CASE REPORT

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Introduction: Myeloproliferative syndromes are a group of diseases characterized by clonal and malignant proliferation of one or more myeloid cell lineage. The identification of the JAK2 protein's V617F mutation is a major event in their management.

Materials and Methods: We report the case of 49-year-old female with no pathological history admitted for the exploration of acute ischemia due to thrombosis of the right pedal artery on a healthy artery, clinically, she presented with pain, paraesthesia and coldness followed by cyanosis and purulent collection in the right big toe, Inflammatory syndrome with microcytic monochromatic anaemia on laboratory tests and Lower limb arterial Doppler-ultrasound revealed total occlusion of the right pedal artery than the patient was put on curative anticoagulation combined with antibiotics and local care for the collection and the evolution was favourable.

Discussion: The etiological investigation revealed a myeloproliferative syndrome with a positive JAK2 mutation after ruling out embolic causes (cardiovascular, infectious endocarditis, atherosclerosis, blue toe syndrome, thrombophilias, and arterial tropism vasculitis).

Conclusions: This case highlights the importance of considering myeloproliferative disorders in the differential diagnosis of unexplained thrombotic events and the importance of early diagnosis and the search for the *JAK2V617F* mutation for optimal therapeutic approaches to prevent thrombotic recurrences, also the specific characteristics of inaugural thromboses, irrespective of their location, remain poorly understood this underscores the imperative for further research to deepen our insights and pave the way for advancements in the field.

Keywords: *myeloproliferative, syndromes, thrombosis, research*

[Abstract:0932]

OCCULT MUCINOUS COLON CANCER PRESENTING WITH DISSEMINATED CARCINOMATOSIS OF THE BONE MARROW

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Introduction: Mucinous adenocarcinoma is a subtype of colorectal adenocarcinoma, tends to occur at a younger age and is associated with a greater frequency of lymph node and distant metastases[1].

Case Presentation: A 44-year-old female patient was admitted to hospital with abdominal pain. Tomography revealed diffuse LAP (4 cm) and pancytopenia was found. There were no B symptoms. PET-CT was performed, diffuse LAP& intramedullary involvement were found. A cervical lymph node was excised and pathological examination showed positive results for CK7, CK20, CDX2, contained mucin indicating mucinous adenocarcinoma originated from colon. The patient received intermittent platelet infusion due to grade 4 tropmbocytopenia and diagnosed as acute disseminated intravascular coagulation (DIC) because of prolonged aPTT, low fibrinogen increased D-dimer. Lower and upper endoscopy indicated no malignancy. Bone marrow biopsy confirmed tumour metastasis. The patient received palliative chemotherapy. DIC and thrombocytopenia improved in the follow-up and the patient no longer needed supportive treatment. The patient was discharged with a good general condition. The patient is still receiving chemotherapy on an outpatient basis.

Conclusions: Disseminated carcinomatosis of the bone marrow (DCBM) include abnormalities such as low blood cell counts or DIC and is uncommon. It rarely seems in colon cancer. Rapid improvement after treatment of primary disease is remarkable.

Reference

1-Hosseini S et al. Ann Colorectal Res 2016;4: e34404.

Keywords: *mucinous, cancer, metastasis*

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[Abstract:0966]

IMMUNE THROMBOTIC THROMBOCYTOPENIA PURPURA COMPLICATING SYSTEMIC MASTOCYTOSIS: A RARE PRESENTATION

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Systemic mastocytosis (SM) is a rare haematological malignancy characterized by the accumulation of morphologically abnormal mast cells in more than one organ system. Thrombotic microangiopathy (TMA) is a life-threatening condition among patients with solid or hematological malignancies. We hereby present a case of immune TMA in a patient with systemic mastocytosis. A sixty-nine-year-old female patient with systemic mastocytosis with associated hematologic neoplasm diagnosed a month ago and under midostaurin treatment (2x100 mg/day) has presented to the clinic with unresponsiveness and dizziness. Laboratory work-up was consistent with coombs negative haemolytic anaemia, severe thrombocytopenia with normal coagulation parameters (Table1) while peripheral smear had revealed diffuse schistocytes. The PLASMIC-score was 6 indicating high risk for TTP, thus, we have initiated therapeutic plasmapheresis, and medical therapy with corticosteroid and rituximab (375 mg/m^2 per-week) after sampling blood for ADAMTS13 activity. ADAM-TS13 activity has found to be immeasurably low with positive anti-ADAMTS-13 antibody. Conversion of haemolytic parameters into negative along with the clearance of schistocytes on peripheral smear and return of thrombocytes to the baseline levels have been achieved after six cycles of plasmapheresis. Patient has been further evaluated for the status of the underlying haematological malignancy via serum tryptase activity (>200 kU/L) and repeat bone marrow biopsy. Cladribine therapy (0.14 mg/kg/day for five days) has been initiated. Patients with malignancies are especially challenging to diagnose and manage since malignancy-associated TMA may be misinterpreted as immune TTP, while disease itself or therapeutic alternatives may lead to TTP. Our case report is significant by being, to the best of our knowledge, the first case of immune TTP complicating the course of systemic mastocytosis while also indicating the importance of management with both immune TTP itself and underlying malignant condition.

Keywords: *thrombotic microangiopathy, thrombotic thrombocytopenic purpura, mastocytosis*

Parameter	Result	Parameter	Result
WBC (K/µL)	18.36	Coombs test	Negative
Haemoglobin (g/dl)	4.9	LDH (U/l)	958
MCV (fL)	86	Total bilirubin (mg/dl)	3.61
Platelet (K/µL)	5	Direct bilirubin (mg/dl)	1.34
INR	1.08	Haptoglobin (g/L)	<0.1
aPTT	26	Corrected reticulocyte percentage	0.52%
Creatinine (mg/dl)	0.8	ANA profile	Negative

Table 1. *The initial laboratory work-up of the patient. (Abbreviations: WBC-White blood cell, MCV-Mean corpuscular volume, INR-Internationalized ratio, aPTT-Activated partial thromboplastin time, LDH-Lactate dehydrogenase, ANA-Anti-nuclear antibody, K-Thousand, U-Unit, l-liter, g-gram, dl-deciliter, µL-Microliter, fL-Femtolitre).*

[Abstract:0976]

CIDOFOVIR-INDUCED ANTERIOR UVEITIS: A RARE PHENOMENON

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Introduction: Anterior uveitis (AU), referring to the inflammation of iris and/or ciliary body with an incidence of 20.3 per 100.000 person-years, has various underlying aetiologies including infectious and autoimmune diseases, various medications, and ophthalmological conditions.

Case Presentation: A sixty-two-year-old female patient with history of precursor B-cell lymphoblastic leukaemia treated under the German multicentre ALL (GMALL) protocol six years ago has undergone allogeneic hematopoietic stem cell transplantation (HSCT) for therapy-related acute myeloid leukaemia with complex karyotype after receiving 3+7 induction therapy. The patient has been diagnosed with BK-virus induced haemorrhagic cystitis (BKV-HC) at post-transplant day 41 for which treatment with intravenous and intravesical cidofovir treatment had been initiated along with a reduction at maintenance immunosuppressive regimen. At post-transplant day 90 patient has developed sharp eye pain along with redness and blurred vision after a total of three cycles of intravenous and intravesical cidofovir therapy. The patient has been diagnosed with acute AU while detailed work-up has not revealed any infectious or autoimmune aetiology besides cidofovir therapy.

Discussion: BK-virus reactivation is a common phenomenon in HSCT recipients with 10-15% prevalence of haemorrhagic cystitis with limited therapeutic alternatives. Although cidofovir-induced AU is almost exclusively described in HIV-positive patients with CMV retinitis, we describe such rare case in HSCT recipient with BKV-HC (3).

Keywords: *anterior uveitis, hematopoietic stem cell transplantation, BK-virus, cidofovir*

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[Abstract:1013]

A CASE OF HEREDITARY SPHEROCYTOSIS WITH NORMAL MEAN ERYTHROCYTE HAEMOGLOBIN CONCENTRATION AND NO SPHEROCYTES IN PERIPHERAL SMEAR

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Introduction: Hereditary spherocytosis (HS) is a autosomal dominant inheritance disease characterized by anaemia, jaundice and splenomegaly due to hereditary damage of cell membrane proteins (1). Here, we report a case of HS with low haemoglobin and elevated indirect bilirubin (IB) but no spherocytosis on peripheral smear (PS) and normal mean erythrocyte haemoglobin concentration (MCHC).

Case Presentation: A 22-year-old male patient was admitted to the internal medicine service with a prediagnosis of haemolytic anaemia due to elevated indirect bilirubin and anaemia at emergency presentation with the complaint of yellowing of the skin. Pathologic laboratory findings are summarized in Table 1 and imaging studies are summarized in Table 2. The patient was referred to the haematology department with a prediagnosis of HS with all findings.

Discussion: HS is a disease in which the surface of erythrocytes is disrupted by damage to cell membrane proteins spectrin, ankyrin, band 3 and protein 4.2 (2). The life of erythrocytes is shortened and haemolysis occurs. The diagnosis is made with spherocytes in PS, elevated MCHC, high osmotic fragility and high eosin 5' maleimide test (3). Treatment includes erythrocyte transfusion, folic acid replacement and splenectomy in selected cases (4).

Conclusions: Haemolytic anaemia should be considered in patients with elevated IB and gallstones in the aetiology of anaemia. Especially in HS cases who are not diagnosed in adulthood but are caught during periods of aplastic crisis such as Parvovirus B19 infection, as found in this case, diagnosis should be made rapidly, treatment and life changes should be implemented.

Sources:

(1)https://www.thd.org.tr/thddata/userflles/flle/herediter.pdf

(2)http://tlp.kocaell.edu.tr/docs/cocuksaglglhastallklarlanablllmdall/hereditersferositoz.pdf

(3)https://onlInellbrary.wlley.com/dol/full/10.1002/cyto.b.20413

(4)https://cms.galenos.com.tr/uploads/article_49093/atfm-46-101-en.pd

Keywords: *anaemia, erythrocytes, haemolysis, haemolytic anaemia, hereditary spherocytosis*

TABLE-1: PATHOLOGICAL LABORATORY VALUES	
ASPARTATE AMINOTRANSFERASE (AST)	276 U/L
ALANINE AMINOTRANSFERASE (ALT)	443 U/L
ALKALINE PHOSPHATASE (ALP)	195 U/L
GAMMA GLUTAMIDACID TRANSFERASE (GGT)	347U/L
TOTAL BILIRUBIN (TB)	30.7 MG/DL
INDIRECT BILIRUBIN (IB)	17.2 MG/DL
WHITE GLOBE (WBC)	4.76*10^3/L
NEUTROPHIL COUNT (NEU*#)	3.68*10^3/L
HEMOGLOBIN (HB)	11.2 MG/DL
PLATELET (PLT)	225*10^3/L
MEAN ERYTHROCYTE VOLUME (MVC)	92.9 FL
MEAN ERYTHROCYTE HEMOGLOBIN CONCENTRATION (MCHC)	31 GR/DL
PROTHROMBIN TIME (PT) / INR IRON (FE)	PTINR 15.6 SN/1.3
TOTAL IRON BINDING CAPACITY (TDBK)	172UG/DL
TRANSFERRIN SATURATION (TSN)	80%
FERRITIN	626 PG/DL
B12	280 NG/L
25 OH VITAMIN D	89MMOL/L
FOLAT	7 NG/ML
CORRECTED RETICULOCYTE COUNT (RETH)	#5.25
HAPTOGLOBIN	0.29
INDIRECT/DIRECT COOMBS	NEGATIVE
PERIPHERAL SMEAR (PY)	WBC COMPATIBLE RBC NORMOCHROME MACROCHROME PLT COMPATIBLE ANISOPOLYCHOCYTOSIS
PERCENTAGE OF OSMOTIC FRAGILITY	68%
EOSIN-5-MALEIMIDE (EMA)	1.2 EMA POSITIVE
PARVOVIRUS B12 IGM	POSITIVE

Table 1. Pathologic laboratory results.

WHOLE ABDOMEN ULTRASONOGRAPHY: GALLBLADDER TR DIAMETER MEASURED 36 MM AND HAD A DISTENDED APPEARANCE. LEVELING SLUDGE AND MULTIPLE MILLIMETRIC STONE ECHOES WERE OBSERVED IN THE LUMEN OF THE GALLBLADDER. SPLEEN KK SIZE WAS MEASURED AS 16 MM.
WHOLE ABDOMEN CONTRAST ENHANCED COMPUTED TOMOGRAPH: THE SIZE OF THE LIVER WAS MEASURED AS 200 MM AND INCREASED. THE SPLEEN SIZE WAS INCREASED AND MEASURED 165 MM AT THE WIDEST PART OF THE CK. THE WALL THICKNESS OF THE GALLBLADDER WAS NORMAL AND MULTIPLE MILLIMETER STONES WERE OBSERVED IN THE LUMEN, THE IHSY AND EHSY WERE OF NORMAL WIDTH. SEVERAL MILLIMETER LYMPH NODES WERE OBSERVED IN THE PERIPORTAL AREA.
MAGNETIC RESONANCE CHOLANGIOPANCREATOGRAPHY: HYPOINTENSITIES WERE SEEN IN THE GALLBLADDER, WHICH MAY HAVE BELONGED TO MILLIMETER-SIZED STONES, THE LARGEST OF WHICH MEASURED 9 MM IN DIAMETER. THE LONG AXIS OF THE SPLEEN MEASURED 165 MM AND WAS LARGER THAN NORMAL. THE LONG AXIS OF THE RIGHT LOBE OF THE LIVER MEASURED 190 MM AT THE LEVEL OF THE MID-CLAVICULAR LINE AND WAS LARGER THAN NORMAL.
PORTAL VENOUS DOPPLER: THE PORTAL VEIN AND ITS BRANCHES ARE PATENT AND THE MAIN PORTAL VEIN IS OF NORMAL WIDTH (DIAMETER MEASURED 11 MM). LUMINAL FILLING IS COMPLETE IN COLOR MODE. FLOW DIRECTION IS HEPATOPEDAL. NO EVIDENCE OF THROMBOSIS. PERIPORTAL COLLATERAL FORMATION. PARAUMBILICAL VEIN HAD NO FLOW. HEPATIC VEINS AND VENA CAVA INFERIOR WERE PATENT. HEPATIC VEINS HAD NORMAL (HEPATOFUGAL) FLOW AND NO EVIDENCE OF THROMBOSIS.
THORAX COMPUTED TOMOGRAPHY: LEFT PULMONARY ARTERY DILATED THE BILATERAL LUNG HAS A MOSAIC VENTILATION PATTERN WITH DIFFUSE PATCHY AREAS OF VERY LOW DENSITY GROUND GLASS.
SUPERFICIAL ULTASONOGRAPHY: CERVICAL LAP: ABSENT AXILLARY LAP: ABSENT INGUINAL LAP: ABSENT
ECHOCARDIOGRAPHY: MIN MY MIN TY SPAB:21 EF:65% WALL MOVEMENTS NORMAL IVC NORMAL RESPIRATORY VARIATION PRESENT.
ENDOSCOPY: ANTRUM MUCOSA WAS HYPEREMIC AND EDEMATOUS. PYLORUS WAS CENTRALIZED. MUCOSA AND LUMEN WERE NORMAL IN BULBUS AND DUODENUM SECOND MASS. ANTRAL GASTRITIS

Table 2. Imaging Performed.

[Abstract:1018]

A CASE OF HIGH-GRADE NON-HODGKIN LYMPHOMA APPEARING AS A THORACIC MASS IN AN 86-YEAR-OLD FEMALE

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Purpose: To illustrate the case of a patient presenting with a thoracic mass that proved to be a high-grade NHL.

Methods: An 86-year-old female was admitted due to the presence of a thoracic mass. She reported noticing the mass the last month, while she also complained of generalized malaise, fatigue and night sweats spanning the last six months. On clinical examination, a palpable hard, nonmobile sternal mass, breast enlargement, and left upper extremity swelling were observed (Figure 1).

Findings: Initial lab tests revealed hypercalcemia (Ca: 12.1 mg/dl).

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Chest CT revealed an invasive lesion of the anterior chest wall, and a block of lymph nodes in the left axillary region. Abdominal CT showed hepatomegaly. Furthermore, MRI revealed a mass of the anterior chest wall (17 x 9 x 12 cm). The mass permeated the pectoralis muscles, the sternum and anterior lateral arches. Also, abnormally swollen lymph nodes were observed in the axillary regions bilaterally. Consequently, the patient underwent a fine-needle biopsy, which revealed high-grade nodular non-Hodgkin lymphoma with a diffuse growth pattern [CD20(+), bcl2(+), bcl6(+), CD10(+), ki67(65-75%)]. The patient perished two days before the result of the pathology report.

Conclusions: Non-Hodgkin lymphomas (NHL) constitute a hematopoietic cell's malignancy. They can affect either lymph nodes or extra-lymph node sites. High grade NHL has high mortality without timely treatment and its diagnosis can take many days to establish. Therefore, the role of the medical community, especially that of the primary care doctor, is crucial in facilitating an early diagnosis and contributing to the patient's survival.

Keywords: *high grade non-Hodgkin lymphoma, thoracic mass, biopsy*

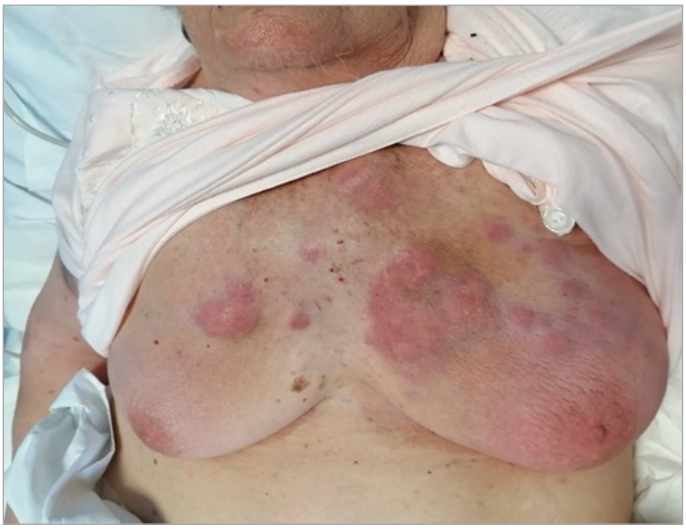

Figure 1.

[Abstract:1023]

A CLINICAL CASE OF AN ELDERLY GREEK HIV NEGATIVE MALE PATIENT WITH CLASSIC KAPOSI SARCOMA

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Summary: Kaposi sarcoma is a low-grade vascular, mesenchymal tumour, predominantly involving mucocutaneous sites. Four types of sarcoma Kaposi have been described. All types are associated with infection due to human herpes virus 8 (HHV-8). The course of the disease is usually long. When predisposing factors (e.g., human immunodeficiency viral infection (HIV), transplantation history) do not exist, diagnosis of sarcoma Kaposi is more challenging. Classic Kaposi sarcoma is more prevalent among elderly men at the Mediterranean basin and Eastern Europe.

Purpose: We describe a rare case of an elderly Greek patient with multifocal classic Kaposi sarcoma.

Methods: An 82-years old, HIV negative patient, presented with a ten-month history of red, painless skin spots at the palmar surface of the hands that gradually became confluent, forming skin plaques and painful nodules. These lesions grew locally, but they also spread to the anterior surface of the tibia, feet, neck and face. Inspection of the oral mucosa also revealed a well-defined violaceous lesion. Skin biopsies were performed.

Findings: Histopathological examination highlighted mesenchymal tissue of vascular origin with immunohistochemical markers (HHV-8, BCL2, CD34) supportive of Kaposi sarcoma. Endoscopy ruled out involvement of the gastrointestinal tract. Computed-tomography scans revealed soft tissue lesions around the maxilla, tongue, epiglottis and tonsils.

Conclusions: He is still treated with chemotherapeutic agents with initial response. Classic Kaposi sarcoma is a rare malignancy with slow progression. Identification of its atypical early manifestations calls for increased clinical awareness in view of a timely diagnosis.

Keywords: *classic Kaposi sarcoma, human herpes virus-8, mesenchymal tumour*

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[Abstract:1032]

FERRIC CARBOXYMALTOSE INDUCED METHAEMOGLOBINEMIA: PRELIMINARY DATA OF A NOVEL SIDE EFFECT

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Background and Aims: Acquired methemoglobinemia, a change from a reduced ferrous state to an oxidized ferric state of haemoglobin iron, is commonly caused by drug exposure that induces oxidation, either directly or indirectly. We aimed to evaluate if ferric carboxymaltose causes methemoglobinemia.

Methods: In this retrospective analysis, anonymized data of patients who had venous blood gas (VBG) analysis conducted before and after the second administration of ferric carboxymaltose due to higher methaemoglobin levels found during the first administration in VBG conducted for various clinically indicated reasons were included.

Results: Two hundred sixty-two patients received ferric carboxymaltose between January 1 and November 30, 2023, of which seven patients had VBG available before and after the second dose. The patients were all female and had a median age of 43. Their median haemoglobin was 8.6 g/dL, ferritin was 3.55 ng/mL, and transferrin saturation was 4.55%. All but one of the patients experienced a rise in methaemoglobin after a median of 37 minutes post-infusion, with a median rise of 1.1% and a peak methaemoglobin concentration of 3.1%. Methaemoglobin concentrations returned to normal after a median of 4 hours post-infusion.

Conclusions: Methaemoglobinemia has been rarely reported after intravenous iron, with only one case report showing a rise from 0.8% to 1.8% after the second dose of ferric carboxymaltose. Although methaemoglobinemia occurred in all but one of our cases, it was asymptomatic, mild and resolved within several hours without intervention. Further studies should investigate whether methaemoglobinemia measurements are false positives, as observed with other medications.

Keywords: *ferric carboxymaltose, intravenous iron, methaemoglobinemia*

[Abstract:1037]

TRANSITION FROM CASTLEMAN DISEASE TO POEMS SYNDROME IN AN ELDERLY PATIENT: POOR PROGNOSIS WITH PULMONARY INVOLVEMENT

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POEMS syndrome involves two mandatory criteria (polyneuropathy and monoclonal plasma cell [PC] proliferation), at least one major criterion (Castleman disease, sclerotic bone lesions, or increased VEGF level) and at least one minor criterion (organomegaly, extravascular volume overload, endocrinopathy, skin changes, papilledema and thrombosis/polycythemia). In the current case, we describe an elderly patient who progressed to POEMS syndrome diagnosis from Castleman disease and multiple minor criteria.

Case Presentation: A 71-year-old man was admitted with exertional dyspnoea, productive cough and numbness in hands and feet. He had a history of pleural effusion drainage twice and pneumonia-related hospitalization in the last 1 year. Castleman disease had been diagnosed with lung wedge biopsy. He had received Rituximab. In the current admission, we identified sclerotic lesions in the hands, hyperpigmentation in the face hand legs, and subclinical hypothyroidism. Protein electrophoresis showed a polyclonal increase in β globulin and gamma bands without the 'M' band. IgA lambda was not detected. On the other hand, electromyography showed sensorimotor demyelinating polyneuropathy. Non-visible monoclonal PC increase was interpreted to be due to uneven, patchy bone marrow involvement and small clonal PC dichroism. Therefore, with the evidence of neuropathy, two mandatory criteria were established one year after the Castleman disease. The patient was lost due to pulmonary sepsis in a short time after diagnosis.

In conclusion, although neuropathies frequently accompany chronic diseases and protein electrophoresis abnormalities are common with advancing age, rare diseases and syndromes should be kept in mind when progressive pulmonary diseases and skin changes accompany them.

Keywords: *POEMS syndrome, polyneuropathy, myeloproliferative disorders, Castleman disease*

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[Abstract:1063]

SKELETAL METASTASES OF DIGESTIVE ORIGIN IN RHEUMATOLOGY: A DESCRIPTIVE STUDY OF 18 CASES

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Describe the epidemio-clinical features of patients admitted to Sfax Rheumatology Department with bone metastases of digestive origin. Outline complications and patient progression profiles.

Methods: A retrospective descriptive study in Sfax Rheumatology Department focused on patients hospitalized for digestive origin bone metastases.

Results: Studying 18 cases of bone metastases from digestive primaries revealed an average age of 65.89 years (34-86), 83.3% males, and a 5:1 male-to-female ratio. Half was rural. Patient presentations included inflammatory or mixed back pain (38.88%), lumboradicular pain (27.77%), diffuse bone pain with systemic decline (22.22%), and incidentally discovered hypercalcemia (11.11%). Eighty-eight-point nine percent had a revealing metastasis with symptoms lasting 1 to 35 months. Hospitalization durations ranged from 2 to 63 days, averaging 28.72 days. Primary cancers included colon (27.8%), gastric (22.2%), pancreatic (16.7%), biliary (11.1%), hepatic (11.1%), gastrointestinal (5.6%), and cholangiocarcinoma (5.6%). Forty-four-point four percent had no other metastatic sites. Other sites included hepatic (27.8%), nodal (22.2%), pulmonary (16.7%), and peritoneal carcinomatosis (5.6%). Biopsy methods: bone alone (27.8%), primary tumour alone (22.2%), bone marrow (16.7%), both (5.6%). Complications during hospitalization: neurological (11.1%), hemodynamic (16.7%). Transfer rate: 16.7%. Mortality: 11.1%. Outcomes: clinical improvement (5.6%), discontinuation against medical advice (16.7%), and 50% lost to follow-up.

Conclusions: Though not conventionally considered osteophilic, the increasing occurrence of bone metastases from digestive neoplasms, with male predominance, multi-site metastases, high complications, and diagnostic implications, suggests potential osteophilic characteristics.

Keywords: *digestive bone metastases, epidemioclinical characteristics, revealing metastasis, complications and progression, multi-site metastases, osteophilic considerations*

[Abstract:1088]

LATE DIAGNOSIS OF POLYCYTHEMIA VERA WITH PET-CT

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A 72-year-old woman without past medical history. She presented with headache, left crural paresis and left brachio-crural hypoesthesia (NIHSS 2), hypertension (183/81 mmHg), with ECG in sinus rhythm. The cranial CT with contrast and MRI showed a superior sagittal sinus venous thrombosis. The PET-CT scan showed heterogeneous uptake throughout the axial skeleton (predominantly L5 and right iliac crest) and mediastinal adenopathies suggesting tumour infiltration. Laboratory tests had no alterations, autoimmunity study, thrombophilia, proteinogram and tumour markers were negative. The bone marrow study was normal. Hematologic pathology is ruled out and it is oriented as a probable inflammatory aetiology. At 3 months of discharged, she was complete recovered. In the PET-CT scan control the lesions persisted, but with a decrease in uptake. Laboratory tests showed a Hb of 160 g/l and platelets of 510,000. At one year of discharged the Hb increased to 189 g/l with positive JAK2 and low erythropoietin coming up with the diagnosis of polycythemia vera therefore hydroxyurea and phlebotomies were started. The peculiarity of this case lies in the initial normal hemogram and PET-CT uptake that confounded the tumour aetiology. It has been seen that radiopharmaceutical uptake in PET-CT may be related to the activity of myeloproliferative syndromes and may be an alternative to bone marrow biopsy as a non-invasive technique.

Keywords: *polycythemia vera, sinus venous thrombosis, PET-CT*

[Abstract:1099]

A 83 YEAR OLD CASE WITHOUT ANAEMIA

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Thrombotic thrombocytopenic purpura (TTP) is classically characterized by the pentad of MAHA, thrombocytopenia, neurological dysfunction, kidney dysfunction and fever. However, only 40 percent of patients have all the five manifestations.

In particular, the presence of both thrombocytopenia and microangiopathic haemolytic anaemia (MAHA) are regarded by many clinicians as cornerstones of TTP diagnosis. It is important to note, however, that these well-known features are not present in all cases of TTP; for example, it has been shown that schistocytes are not present or obvious in every case of TTP.

In this report, we describe a case of TTP in which the patient did not exhibit obvious schistocytes on a blood smear, but had a significantly reduced level of a disintegrin and metalloproteinase

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with thrombospondin type 1 motif, member 13 (ADAMTS13) activity (<10%). The patient achieved remission of TTP following therapeutic plasma exchange (TPE).
By presenting these details, we aim to raise awareness that TTP can occur without the presence of pathognomonic schistocytes and anaemia.

Keywords: *anaemia, thrombotic thrombocytopenic purpura, thrombotic microangiopathy*

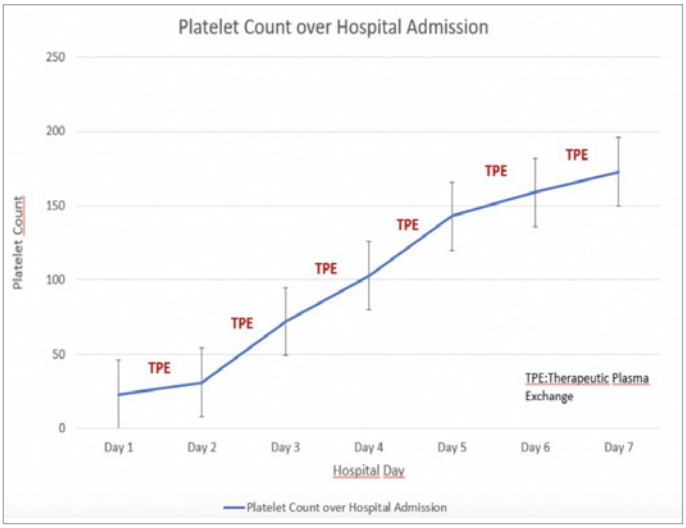

Figure 1. *Response of Platelet count to Therapeutic Plasma Exchange over the course of hospitalization.*

[Abstract:1101]

THE DELAY IN THE DIAGNOSTIC OF INDOLENT LYMPHOPROLIFERATIVE DISEASES

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Introduction: Non-Hodgkin lymphomas are a diverse group of hematologic malignancies that are variously derived from B cell progenitors. The range of clinical presentation is related to the histologic subtype and the associated location.
Case Presentation: A 51 year old woman, history of chronic gastritis and an inguinal nodule since 2019 that was sonographically nonspecific. She went to the Emergency Department due to generalized abdominal colic pain that had lasted for about 1 year without response to symptomatic treatment. Lately with moderate dyspnoea and sensation of chest "heaviness". At physical examination, there was an ovoid mass in the umbilical area measuring approximately 10 cm in diameter, hard-elastic, mobile and painless. She reported pain on deep palpation of the right iliac fossa. It was detected an occipital adenopathy measuring approximately 1 cm, hard, not very mobile and painless. Analytically, normal DHL and beta 2 microglobulin was elevated without other notable changes. She underwent a biopsy guided by computed tomography, verifying that the mass was contiguous with the uterus and a second mass with characteristics of a peritoneal implant. Pathological anatomy revealed small cell B lymphoma. The patient was referred for an Outpatient Haematology Oncology Consultation, and stage IV-A follicular non-Hodgkin lymphoma was diagnosed. It was proposed 6 cycles of R-CHOP and the patient showed a complete response after 4 cycles.
Conclusions: Indolent non-Hodgkin lymphomas may go unnoticed during diagnosis until more advanced stages, such as the case explained. This case highlights the importance of considering this entity in the initial differential diagnosis.

Keywords: *indolent lymphoma, abdominal pain, adenopathy*

[Abstract:1138]

ATIPICAL PRESENTATION OF B-CELL LYMPHOMA

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In autoimmune haemolytic anaemia (AIHA) an accelerated red blood cell immune-mediated destruction occurs, leading to fatigue, paleness, and breathlessness. B-cell lymphoma originates from the lymphatic system's B cells, causing excessive cell growth and immune system dysfunction, often resulting in lymph node enlargement and B symptoms: fever, night sweats, and weight loss.
A 55-year-old woman with a past history of AIHA was admitted in the emergency department. She presented respiratory distress (35 cpm), tachycardia (35 bpm), fever (tympanic 38.6ºC) and jaundice. Blood work revealed leukocytosis (23940 u/L), elevated C-reactive protein (25 g/dl), hyperbilirubinemia (total 3.14 mg/dl), stage 3 AKIN kidney injury, metabolic acidosis with lactate of 22 U/L, and anaemia (3 g/dL). CT scan revealed hepatosplenomegaly, splenic infarction and was otherwise unremarkable.
An acute exacerbation of AIHA and septic shock with multiorgan dysfunction was diagnosed. She was started on antibiotic therapy, invasive ventilatory and renal support, blood transfusion, steroids (1 g/day) and immunoglobulin therapy (35 g/day).
Persistent hematologic dysfunction prompted a bone biopsy, revealing B-cell lymphoma and cytomegalovirus infection. Despite treatment, her clinical condition worsened, and she died.
This case demonstrates the need for multidisciplinary approach in complex situations and differential diagnosis in refractory conditions. AIHA is mostly secondary to infections, immunodeficiencies, autoimmune or lymphoproliferative disorders, including non-Hodgkin lymphomas (NH), with which it's associated in 5 to 20% of cases. In NHL, AIHA appears to be associated with the formation of autoantibodies due to chronic antigenic stimulation.

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In the case described, the maintenance of haematological dysfunction and the severity of the clinical condition led to the diagnosis of B lymphoma.

Keywords: *non-Hodgkin, lymphomas, autoimmune, haemolytic, anaemia*

[Abstract:1190]

SINGLE CENTER EXPERIENCE OF PATIENTS WITH CML TREATED WITH BOSUTINIB

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Chronic myeloid leukaemia (CML) is characterized with the presence of Ph-chromosomet (9;22).It has been diagnosed mainly 50-60ies and 3phases (chronic, accelerated, blastic) could be seen in the course of disease if left untreated. It 'has' had a moderate course after discovery of Tyrosine-Kinase-Inhibitors; firstly imatinib then dasatinib, nilotinib, bosutinib, which inhibit the-ATP binding-pocket of bcr-abl protein synthesized after translocation between chromosome9and22.Although the first-targeted-drug is imatinib in CML, dasatinib, nilotinib can also be used as first-line-treatment in the treatment of newly-diagnosed-CML-patients. Bosutinib has got approval and reimbursement as asecond-line-treatment-of-patients with-CML-who are resistant/intolerant to imatinib.

The aim of this study is to evaluate retrospectively the patients with CML and treated with Bosutinib in terms of their demographic, disease characteristics and response pattern to Bosutinib. We have evaluated 12 patients by using their-hospital-records and used the parameters as; age, sex, reason-for-switching-to-Bosutinib, haematological/cytogenetic/molecular-response and duration-of-response-to-Bosutinib, adverse-effects, comorbidities, response status.

As can be seen in Table-1, we have 8 males and 4 females patients with the-median-age-of-60.9 years. The median time-duration from the diagnosis-181, 75-months. Our patients have used bosutinib as third-line-therapy (only-1-patients as second-line-therapy). The main reasons for switching-therapy from imatinib/dasatinib/nilotinib are summarized as; hematological/cytogenetical/molecular-response-lost or side-effects like pleural effusion or grade 3-4-skin-reactions.

As indicated in-Table-2, in most of the patients, bosutinib has been used as third-line-therapy due to regulations and approval issues. Most of our-patients have used dasatinib/nilotinib as second-line-therapy and, became resistant (hematological/cytogenetical/molecular-respons-loss) or intolerant-to-both or any of those drugs.

Bosutinib has provided stable-molecular-response in all patients, molecular-response equal or more than major-molecular-response (MMR) has-been obtained. Patients treated with bosutinib have at least one/more comorbidities and bosutinib does not have any deteriorating effect on those associated diseases. We have seen dose-reduction or interruption only in 2 patients due to diarrhoea and all those are temporary. It hasn't been seen any dose-limiting or dose-changing side effects in any patients.

In conclusion, bosutinib can be used safely and preferably in patients with CML, who're refractory/resistant, or intolerant-to-imatinib.

Keywords: *chronic myeloid leukaemia (CML), tyrosine kinase inhibitors (TKI), dasatinib, nilotinib, bosutinib*

Age	Sex	Time from diagnosis (months)	2nd step (Dasa/Nilo)	Dasa/nilo duration(months)	Reason for quitting dasa/nilo
77	Male	72	Dasatinib	312	Cytogenetical response lost
53	Male	312	Bosutinib+Nilotinib	156	Hematological response lost
65	Male	88	Dasatinib	47,5	Pleural effusion
45	Male	108	Nilotinib	13	Cytogenetical response lost
56	Female	171	Nilotinib+Dasatinib	12	Hematological response lost
67	Female	96	Nilotinib+Dasatinib	12	Molecular response lost
39	Female	28	Dasatinib	6	Molecular response lost
49	Male	84	Dasatinib+Bosutinib+Nilotinib	48/12	Pleural effusion
74	Male	178	Dasatinib	84	Grade 3-4 skin reactions
55	Male	480	Dasatinib	29	Molecular response lost
81	Male	312	Dasatinib+Nilotinib	240/1	Pleural effusion/intolerant
70	Female	252	Nilotinib+Dasatinib	1-2/48	Intolerant/Pleural effusion

Table 1. *The summary of patients characteristics before Bosutinib treatment.*

Bosutinib duration (months)	Bosutinib dose (mg/day)	Best response to Bosutinib	Bosutinib side effects	Comorbidities	Response to bosutinib (months)	Response protection (monhs)	Reason for discontinuing Bosutinib
37	500	Cytogenetical	Shortness of breath	HT, Asthma	3	34	uses
60	500	Molecular	*	CKD, HT	3	60	t315i:+
25	300	Clinically/molecular	*	CAD, AMI, CKD	0-1	25	uses
40	500	Molecular/Cytogenetical	Pain of joint, fatigue	COPD	3	40	uses
51	200	Haematological	*	HT, Asthma	33	18	ASCT, Ponatinib
18	500	Molecular/Cytogenetical	*	*	1	24	uses
16	500	Cytogenetical	Fatigue	Fibromyalgia, Neurosis	4	12	uses
9	400	Molecular	Diarrhea	Hashimoto's thyroiditis	0-1	9	Diarrhea Nilotinib
32	500	Molecular/Cytogenetical	Pain of side	DM, CAD, AMI, COPD	0-1	33	uses
6	500	Molecular/Cytogenetical	Dyspepsia, pain of bone	*	1	5	uses
3-4	500	Haematological	Dyspnea	*	1	3	Diarrhea Dasatinib
11	200	Molecular	Fatigue	MM, Dementia, Alzheimer's	3	11	uses

Table 2. *The summary of patients with CML and under treatment with bosutinib.*

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[Abstract:1193]

TRANSFUSION-ASSOCIATED GRAFT VERSUS HOST DISEASE: FAVORABLE PROGNOSIS IN AN IMMUNOCOMPETENT PATIENT

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Transfusion-associated graft versus host disease (TA-GVHD) is a rare complication seen in individuals with immunosuppression. The majority of case reports in the literature follows a life-threatening course with frequent fatality. The current report discusses the characteristics of a TA-GVHD patient with a fairly benign prognosis.

Case Presentation: A 62-year-old male with known chronic kidney disease and congestive heart failure was admitted with severe fatigue, weight loss and skin lesions. He had widespread pigmented, squamous, lichenoid lesions on the body (Figure 1) and lymph node enlargement in multiple areas on physical examination. Blood tests showed anaemia, eosinophilia, hyperbilirubinemia, and increased ferritin level. Nutritional parameters, tumour markers, viral panels, autoantibodies, serum protein electrophoresis and immunoglobulin levels were negative or normal. Ultrasonography showed only hepatomegaly. Positron emission tomography computerized tomography PET-CT showed increased activity in multiple lymph node areas, spleen, and bone marrow suggesting a 'lymphoproliferative disease''. The patient denied a bone marrow biopsy. He had reported allopurinol use for one month before the occurrence of lesions. Although a drug eruption diagnosis was likely with the concomitant eosinophilia, we identified that skin lesions were first noticed after an erythrocyte transfusion during his hospitalization 12 months before. We repeated the skin punch biopsy that reported ''interface dermatitis'' consistent with chronic GVHD.

Conclusions: This report suggests that TA-GVHD may occur in subjects who are not clearly immunosuppressed and who have not received multiple transfusions. The diagnosis may be mixed with lymphoproliferative diseases on PET-CT. The prognosis may be favourable in a lower comorbidity burden.

Keywords: *GVHD, TA-GVHD, blood product transfusion, graft versus host disease*

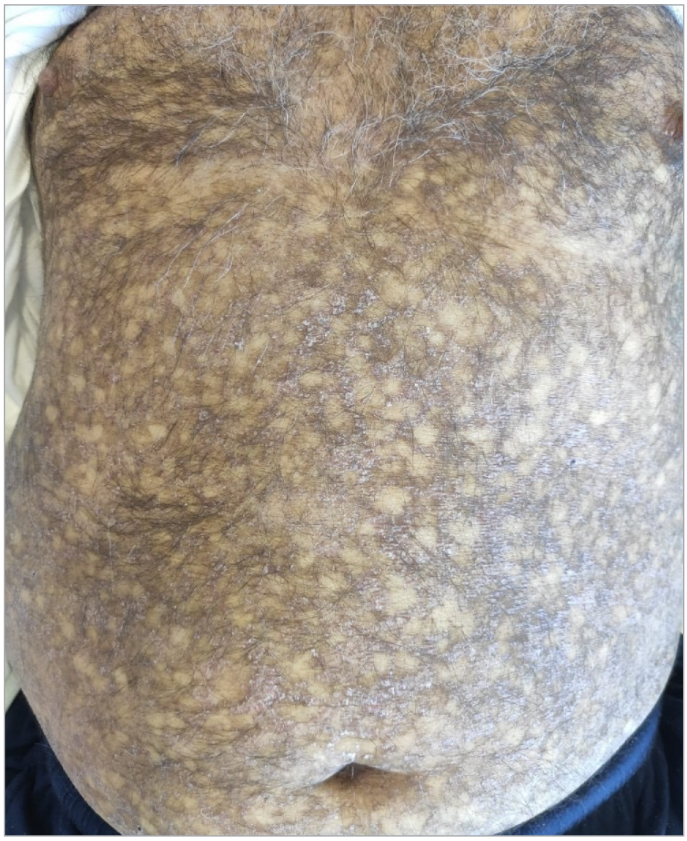

Figure 1.

[Abstract:1212]

PASH SYNDROME: PROLONGED IMMUNOSUPPRESSION AND CANCER

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Case Presentation: A 41-year-old male with a history of arterial hypertension, chronic kidney disease due to nodular glomerulosclerosis, chronic ischemic heart disease, PASH syndrome treated with glucocorticoids and other immunosuppressants and squamous cell carcinoma in the left buttock (Figure 1) surgically intervened. Following surgery, the patient presents exophytic growth and ulceration of the lesions in the surgical bed (Figure 2). To assess oncological activity, a PET-CT is performed, revealing a metabolically active lesion in the left buttock suspicious for malignancy (Figure 3). Biopsy confirms the presence of moderately differentiated squamous cell carcinoma with immunohistochemical expression of PDL-1. Given the tumour's expression of PDL-1, compassionate use immunotherapy with Pembrolizumab is initiated. The patient's course is torpid, with systemic tumour progression and development of cutaneous septic shock. Following the administration of the first single cycle of immunotherapy, the patient finally dies.

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Discussion: PASH syndrome is a rare autoinflammatory syndrome characterized by pyoderma gangrenosum, hidradenitis suppurative, and acne. Its treatment is primarily based on glucocorticoids and other immunomodulators (anti-TNF-alpha, anti-IL1B, anti-IL17, etc.). In our patient, prolonged immunosuppression, as well as the inflammatory nature of his disease, resulted in the development of squamous cell neoplasia. Although compassionate use of Pembrolizumab was decided for this patient, it presents significant cutaneous side effects, with an added risk in our patient due to the possibility of exacerbating his disease.

Keywords: *PASH syndrome, Immunosuppressants, Neoplasia, Pembrolizumab*

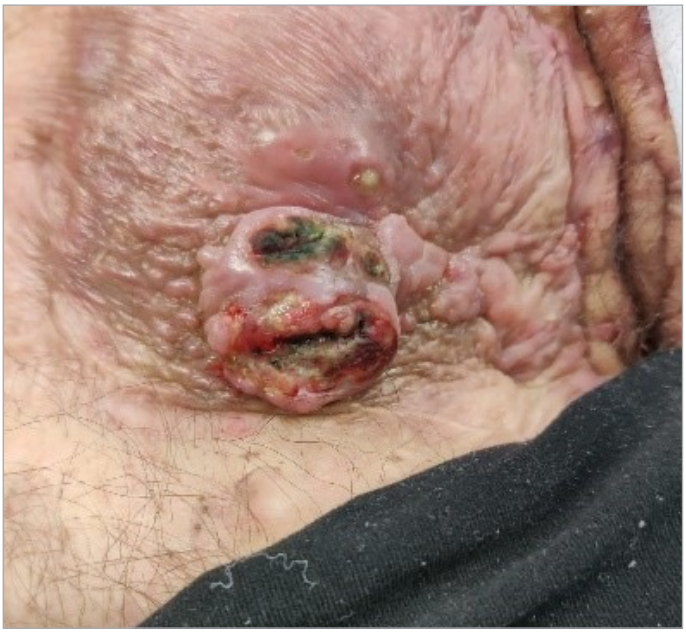

Figure 1. *Squamous cell carcinoma lesions in the left buttock prior to surgical resection*

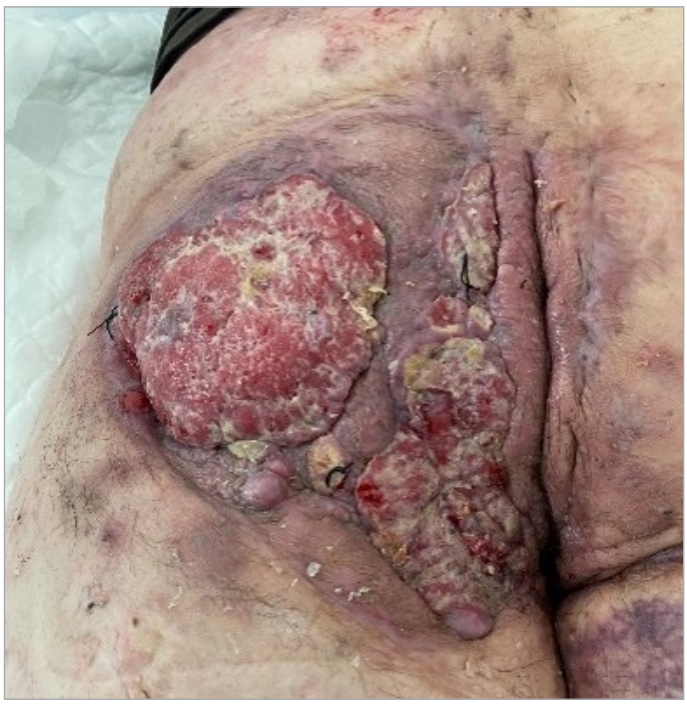

Figure 2. *Cutaneous lesions after surgery, with significant exophytic growth and ulceration suggestive of tumour progression*

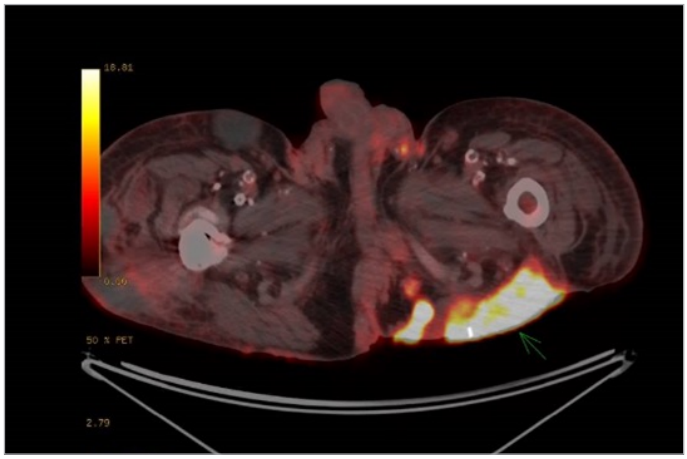

Figure 3. *PET-CT image showing a metabolically active lesion in the left buttock suggestive of malignancy.*

[Abstract:1230]

PROLONGED FEVER REVEALING AN ANGIOCENTRIC LYMPHOMA OF THE FACE

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The angiocentric lymphoma of the face, a rare form of lymphoma, generally located in the upper airways. It is a lymphocytic proliferation having a high rank of malignancy and representing 0.4 in 2.2% of the extra-ganglionic lymphomas of the head and the neck. We report a case of a patient with prolonged fever revealing an angiocentric lymphoma of the face.

Case Report: A 36-year-old patient, smoker, with history of left

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media otitis, was admitted for prolonged fever associated to weight loss of 20 kg. The oto-rhino-laryngologic examination highlighted a congestive nasal mucosae with a purulent flow. Bacteriological examination isolated Gram negative. Imaging showed pansinusian filling prevailing in the left, a mucous thickening of the right maxillary sine and a thinning down of the osseous partitions, of ethmoidal cells and of the internal edge of the left maxillary sine. The histo-pathologic examination of the biopsy of the nasal cavities showed very active, not specific, chronic inflammatory reorganizations with metaplasia and light dysplasia. A purulent rhino-sinusitis was initially retained and the patient was treated by antibiotics. The outcome was marked by the appearance of a lesion of the palate with defect having evolved towards perforation. The histo-pathologic examination of this lesion concluded to an angiocentric lymphoma of the face. The patient was proposed for a chemo-radiotherapy.

Conclusions: The angiocentric lymphoma of the face, constitutes a particular form of lymphoma, the rate of global survival is under 40 % in 5 years. The prolonged fever constitutes an exceptional revelation mode.

Keywords: *angio centric lymphoma, prolonged fever, internal medicine*

[Abstract:1234]

SARCOMA WITH BONE, PULMONARY, LYMPHATIC, MUSCULAR AND SUBCUTANEOUS METASTASIS

Gabriel De Carvalho Ferreira, Joana Vinhais Rodrigues, Gustavo Lemos Correia, Marta Sanches, Daniel Castanheira, Vânia Rodrigues Pereira, Ana Isabel Brochado, David Prescott, Margarida Pimentel Nunes, Célia Machado, José Lomelino Araújo

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Sarcomas are rare tumours and when present they often metastasize to the lungs, although metastasis to less common locations are present sometimes.

An 83-year-old male patient with history of non-Hodgkin's lymphoma in the past, treated with ileocecal resection and excision of retroperitoneal adenopathies. He went to the Emergency Department with intense low back pain that had lasted for around a month, referring a decreased strength in his lower limbs and weight loss estimated at 12%. A CT-scan was performed which showed a pathological fracture of D12 vertebra with spinal cord compression. He underwent percutaneous fixation of D10-D11-L1-L2 with spinal decompression and removal of the epidural tumour sleeve and was admitted to the Internal Medicine Department to study the origin of the neoplasm. Cervical, thoracic, abdominal and pelvic CT-scan was performed which revealed bilateral multiple pulmonary metastasis with lymphangitic carcinomatosis, secondary bone destruction of the vertebral body of D12, metastatic solid nodule in the subcutaneous fat of the left lumbar region, intramuscular metastatic nodules in the right deltoid, left gluteus medius, right tensor fasciae latae, left sartorius and left adductor magnus muscles. The result of the surgical specimen revealed a sarcoma. He began follow-up by the Oncology Department's sarcoma group during hospitalization, but developed nosocomial pneumonia with sepsis. Despite antibiotic therapy, his condition progressively worsened and ended up dying during this hospital admission.

In this case we are talking about a rare tumour, sarcoma, which in turn metastasized to even rarer locations, namely subcutaneous fat and muscle.

Keywords: *sarcoma, muscle metastasis, subcutaneous metastasis*

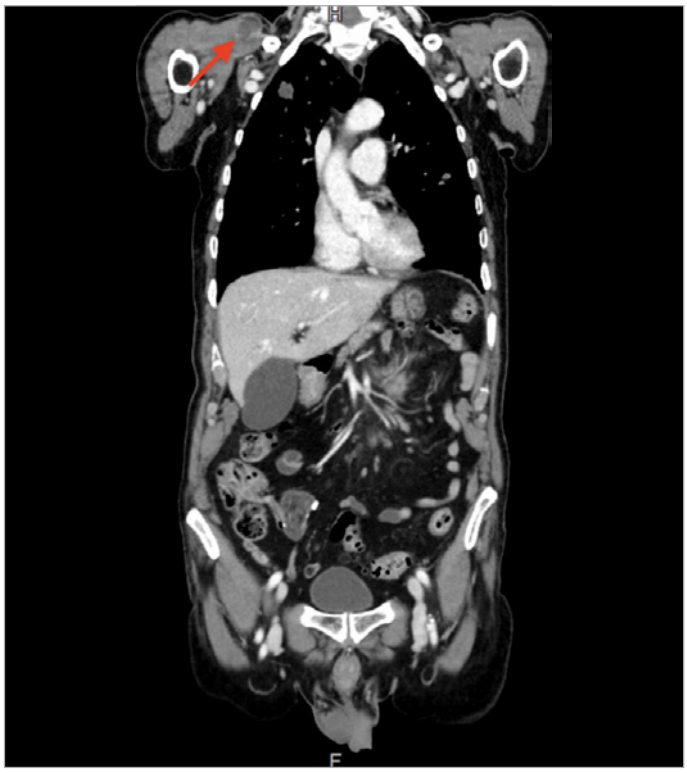

Figure 1. *Deltoid metastasis.*

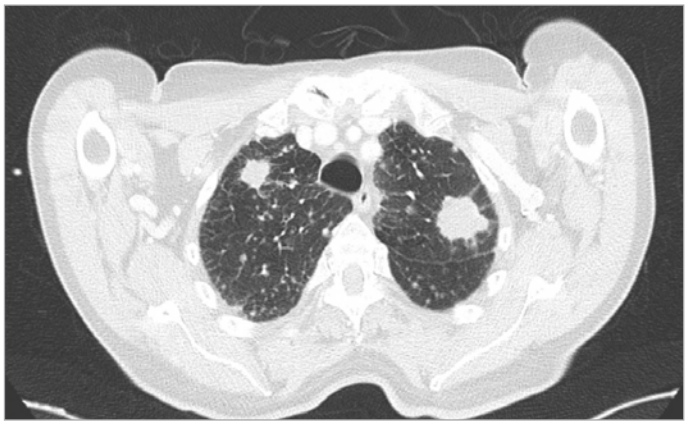

Figure 2. *Lung metastasis.*

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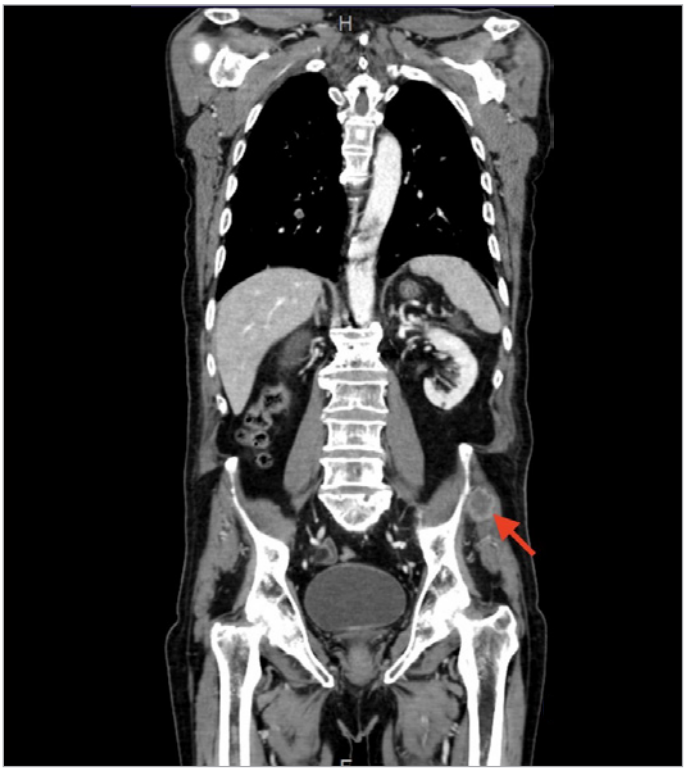

Figure 3. Tensor fasciae latae metastasis.

[Abstract:1262]

RELATIONSHIP BETWEEN JAK2 ALLELE BURDEN AND CLINICAL OUTCOMES IN CHRONIC MYELOPROLIFERATIVE DISORDERS

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Aim: Polycythemia vera (PV), essential thrombocythemia (ET) and primary myelofibrosis (PMF) are chronic myeloproliferative disorders (CMPDs) that exhibit clonal proliferation, characterized by BCR-ABL negative myeloid lineage abnormalities. In this study, we aimed to investigate the impact of JAK2 allele burden on splenomegaly, thrombosis, bleeding, comorbid diseases, hypertension, vasomotor symptoms, bone marrow fibrosis and hematologic parameters in BCR-ABL negative MPNs.

Materials and Methods: We included patients diagnosed with ET, PV and PMF who visited our haematology outpatient clinic between 2005 and 2023 in this study. The study includes 198 patients with ET, 126 with PV and 20 diagnosed with PMF. *JAK2 V617F* mutation analysis was performed using the real-time polymerase chain reaction method.

Results: In our study, the proportion of patients who were *JAK2* positive was 61.1% in ET, 95.2% in PV and 50% in MF. In ET and PV patients, there was a positive correlation between JAK2 burden and splenomegaly, WBC and LDH values. A significant relationship was found between ET and PV, as well as LDL. An increase in *JAK2* burden showed a positive correlation with age and Charlson comorbidity index.

Conclusions: The *JAK2* mutant gene has made a significant contribution to understanding and managing MPN patients and its allele burden is not only associated with being positive but also with clinical and laboratory findings.

Keywords: *myeloproliferative, myelofibrosis, polycythaemia*

[Abstract:1273]

FROM DERMATOLOGICAL LESION TO CARCINOMA

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An 85-year-old man, with no history of interest except for an anxious-depressive syndrome under treatment, presented with a lesion in the right groin of 2 months of evolution, with progressive increase in size, non-painful. Otherwise, asymptomatic, afebrile.

On examination, there was a localized lesion in the upper right thigh, rounded, hard, adherent to deep planes, erythematous-violaceous in colour. No adenopathies were palpated.

In view of the suspicion of malignancy of the lesion, a blood count, coagulation, biochemistry, tumour markers, TSH and proteinogram were requested, with normal results.

A CT scan was performed, which showed an abscessed lung lesion in the right upper lobe, suggestive of malignancy. In addition, a cutaneous tumour was observed in the root of the right thigh, suggestive of cutaneous metastasis. In vertebral body D6 a lesion suggestive of malignancy was visualized. Other findings were ulcerated aortic atheromatosis and infrarenal abdominal aortic aneurysm.

General surgery was consulted to resect the skin lesion. The histological study of the lesion showed a metastatic lesion of poorly differentiated carcinoma, probably of pulmonary origin, without being able to rule out urothelial origin by immunohistochemical markers.

A referral was made to urology, which performed cytology without pathological findings. Given the patient's refusal to continue studies, the patient was referred to oncology to evaluate treatment.

Given the age of the patient, the tumour extension and the patient's refusal to continue studies, chemotherapy treatment was ruled out and supportive care was decided.

Keywords: *carcinoma, malignancy, lung, metastasis*

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[Abstract:1276]

CASE OF A PATIENT WITH SEVERE B12 DEFICIENCY WITHOUT MACROCYTOSIS

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Introduction and Purpose: Vitamin B12 deficiency is quite common in elderly patients. It is almost always accompanied by macrocytosis on CBC often with MCV >100.

Materials and Methods: We present a case of a 78-year-old female patient who has been living in a nursing home for the last three months. The patient came to our hospital due to a mixed respiratory-urinary system infection for which she was put on a therapeutic antibiotic regimen. At the same time, the patient showed anaemia with orthochromic indicators (Hb: 7.8, MCV: 84, MCH: 27.5) without macrocytosis. Hematin markers were sent which revealed a significant deficiency of Vitamin B12 (63 pg/mL), while folate and ferritin were at normal levels. Haemoglobin electrophoresis was sent to investigate possible heterozygous thalassemia, which was normal. At the same time, iron values were 59 μg/dL and TIBC 104 μg/dL (transferrin saturation 56%), an element that excludes coexisting iron deficiency anaemia. Samples were sent to investigate B12 deficiency which revealed high titers of antibodies against the endogenous factor (204 U/ml with normal values <18 U/ml).

Results: The patient was placed on parenteral vitamin B12 replacement, which she will receive periodically for life. She was discharged in a stable clinical condition, with no endoscopy performed due to her poor general health condition.

Conclusions: B12 deficiency can appear without a picture of macrocytosis in the general blood, even when there is no iron deficiency or heterozygous thalassemia.

Keywords: *B12 deficiency, macrocytosis, iron deficiency, thalassemia*

[Abstract:1285]

TESTICULAR METASTASIS AS THE FIRST SIGN OF COLORECTAL CANCER: A RARE CASE

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Introduction: Lung, liver, and lymph nodes are the most common sites of metastasis by colorectal cancer, while testicular metastases are rare. The diagnosis of colorectal cancer metastasis to the testis by orchiectomy is extremely rare.

Case Report: A 62-year-old male patient applied to the urology department with complaints of swelling and pain in the left testis for 2 months. His complaints were accompanied by weight loss. In USG, a 50x39 mm solid mass lesion with a nonspecific lobulated contour filling the scrotum was observed in the testicular cranial. Abdominal CT showed an irregular wall thickness increase thought to be diffuse tumoral in a segment of about 5 cm distal to the sigmoid colon, and a metastatic lesion at the level of a mid-hepatic star in the right lobe of the liver. The patient underwent radical left orchiectomy considering primary testicular cancer. As a result of the pathology, the tumour was observed intermittently in the area around the spermatic cord and infiltrated the paratesticular area. It resulted in CK20, CDX2 SATB2 P53+, evaluated for "colorectal adenocarcinoma" metastasis in the foreground.

In the colonoscopy, a vegetative fragile mass was observed 10-15 cm proximal to the anal verge, surrounding the lumen and preventing the passage of the colonoscope, and biopsies were taken. The biopsy result was defined as KRAS, NRAS, BRAF wild type adenocarcinoma.

Conclusions: Secondary tumours should be considered in elderly patients presenting with a testicular mass, and colorectal carcinoma metastasis should be considered.

Keywords: *colorectal cancer, testicular metastasis, secondary tumour*

[Abstract:1306]

COMORBIDITY IN PATIENTS WITH INVASIVE UROTHELIAL CARCINOMA: A DESCRIPTIVE ANALYSIS

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Introduction: Determining prognostic factors in oncologic diseases has significant implications in medical research and daily clinical practice. Our principal study is intended to correlate some histopathological features with prognostic disease. However, this study must consider other potential factors that can modify disease outcomes. Patients with urothelial carcinoma also have important associated comorbidities and this could impact in prognosis. This study is a preliminary work in order to describe the comorbidity in patients with urothelial carcinoma.

Methods: All patients diagnosed with infiltrating urothelial carcinoma in Cádiz University Hospital between January-2007 and November-2017 were included. Age, sex and comorbidities included in Charlson Index at the moment of diagnosis were recorded. Survival after 5 years of diagnosis was also included. A descriptive analysis was performed using absolute and relative frequencies and median and interquartile range. Comparations between survivors and non-survivors were assessed by Chi-

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squared or Mann–Whitney U tests. P-value 0.05 was considered statistically significant.

Results: 211 patients were included, data is shown in Table1. Most frequent comorbidities were: diabetes mellitus, chronic lung disease, chronic kidney disease and myocardial infarction. Median Charlson Index, age and prevalence of other solid tumour and chronic kidney disease were significantly greater in patients who didn't survive 5 years after diagnosis.

Conclusions: Higher comorbidity (Charlson Index) was founded in non-survivors patients, specially related with kidney disease and other neoplastic lesions. This work aims to include comorbidity in a future full study about prognostic factors in urothelial carcinoma.

Keywords: *Comorbidity, Urothelial carcinoma, bladder cancer, prognostic factor.*

Variable	All (n=211)	5-years survivors (n=124)	5-years non-survivors (n=87)	p value
Sex (male)	181 (85.8%)	106 (85.5%)	75 (86.2%)	0.999
Age at diagnosis (years)*	71 (64-78)	68 (62-74)	74 (67-80)	<0.001
Charlson Index*	2 (0-4)	1 (0-3)	3 (1-5)	0.001
Diabetes mellitus	84 (39.8%)	47 (37.9%)	37 (42.5%)	0.568
Chronic lung disease	64 (30.3%)	34 (27.4%)	30 (34.5%)	0.291
Chronic kidney disease	48 (22.7%)	22 (17.7%)	26 (29.9%)	0.046
Myocardial infarction	48 (22.7%)	27 (21.8%)	21 (24.1%)	0.739
Pheripheral vascular disease	43 (20.4%)	22 (17.7%)	21 (24.1%)	0.299
Congestive heart failure	40 (19.0%)	23 (18.5%)	17 (19.5%)	0.859
Cerebrovascular disease	30 (14.2%)	16 (12.9%)	14 (16.1%)	0.552
Other malignant solid tumour	20 (9.5%)	6 (4.8%)	14 (16.1%)	0.006
Dementia	14 (6.6%)	7 (5.6%)	7 (8.0%)	0.578
Rheumatic disease	11 (5.2%)	6 (4.8%)	5 (5.7%)	0.764
Peptic ulcer	9 (4.3%)	5 (4.0%)	4 (4.6%)	0.999
Liver disease	8 (3.8%)	3 (2.4%)	5 (5.7%)	0.379
Lymphoproliferative disorder	7 (3.3%)	3 (2.4%)	4 (4.6%)	0.632
Hemiplegia	6 (2.8%)	3 (2.4%)	3 (3.4%)	0.983
HIV infection	1 (0.5%)	0 (0.0%)	1 (1.1%)	0.858

Table 1. *Descriptive analysis of comorbidities. Data is shown as absolute frequency (relative frequency). *For age and Charslon index, data is shown as median (interquartile range).*

[Abstract:1329]

THROMBOCYTOPENIA UNMASKED: GPIB-ALPHA MUTATION IN BERNARD-SOULIER SYNDROME

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Man, 35 years old, followed in internal medicine consultation for thrombocytopenia (12x10^9/L) of unknown aetiology, presented in the emergency department. He informed that, some years ago, he took corticosteroids, but the thrombocytopenia was unresponsive to this therapy. He stopped the medication because of side effects. The father's patient had a platelet disease as well and died because of it. The patient reported frequent epistaxis and gum bleeding as symptoms. Physical examination revealed bruises on the upper limbs and chest, locations where the patient denied trauma. Analytically, thrombocytopenia persisted (11 x10^9/L) with a slight increase in mean platelet volume (11.8 fL). In the peripheral blood smear, macrocytic platelets were frequently seen, but without platelet aggregates. Under high dose corticotherapy (1 mg/kg), the maximum platelet count obtained was 18 x10^9/L. Therefore, we proceeded to a progressive reduction of corticosteroids. Autoimmune analysis, bone marrow immunophenotyping, abdominal ultrasound and thoracoabdominopelvic tomography were performed, which revealed no abnormalities. Flow cytometry of platelets and genetic sequencing panel were performed and was identified a rare and pathogenic heterozygous alteration in the GPIb-alpha gene, associated with Bernard-Soulier Syndrome. In the same region of the gene, a variant associated with monoallelic syndrome (autosomal dominant transmission) has been described. The patient is followed up in haematology appointment and was educated about the syndrome on how to react when faced with signs and symptoms of the disease.

Keywords: *thrombocytopenia, macrocytic platelets, flow cytometry, genetic sequencing panel, Bernard-Soulier syndrome*

[Abstract:1348]

A RARE CAUSE IN THE ETIOLOGY OF ACUTE RENAL FAILURE: EXTRAMEDULLARY TESTICULAR PLASMACYTOMA

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Introduction: Extramedullary Disease (EMD) is plasma cell infiltration or soft tissue tumours, which develop by hematogenous spread and occur in various anatomical sites. We would like to share our patient whom we followed with Acute Kidney Injury (AKI) and diagnosed with a rare extramedullary testicular plasmacytoma.

Case Presentation: A 60-year-old male presented with fatigue and vomiting. He also had left scrotal oedema. His medical history included Hypertension, Ischemic Heart Disease and surgery for urethral stenosis. On admission, initial bloodwork showed Creatinine: 4.45 g/dl. Microscopic haematuria was observed in urinalysis. In renal ultrasonography, no post-renal problems were detected. There was no cardiac failure on echocardiography. With the preliminary diagnosis of prerenal AKI, inpatient treatment was started with intravenous hydration therapy. Peripheral blood smear showed normocytic normochromic anaemia. Autoimmune markers for AKI were found to be negative. During the course he developed sudden dyspnoea and a massive left-sided effusion was seen on chest radiography. The fluid was drained, which was serohemorrhagic and exudative according to the Light Criteria, thus further studies were planned for malignancy. Imaging showed a mass measuring approximately 57x47 mm in the left scrotum. Protein electrophoresis revealed M component and in

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serum immune electrophoresis IgD lambda band was detected. An operation was planned and a left orchiectomy was performed. Pathology resulted as plasma cell neoplasm, lambda monotypic, plasma cell infiltration in the spermatic cord connective tissue. Follow-up planned.

Conclusions: EMD can be seen in various sites of the body. Although rare, plasmacytoma should be kept in mind when investigating malignancy.

Keywords: *plasmacytoma, acute kidney injury, pleural effusion*

[Abstract:1353]

HEMOPHAGOCYTIC HISTIOCYTOSIS-LIKE SYNDROME AFTER INITIATION OF RIBOCICLIB THERAPY IN ADVANCED BREAST CANCER PATIENT

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Background: Hemophagocytic histiocytosis (HLH) is a disease of overactive histiocytes and lymphocytes. We report hemophagocytic histiocytosis-like syndrome developed while using ribociclib in a patient with advanced breast cancer.

Case Presentation: A 44-year-old woman diagnosed with early-stage breast cancer seven years before, treated with tamoxifen, one year later relapse on her left axilla, treatment was changed with anastrozole and LHRH. Started ribociclib and fulvestrant combination upon newly development of lymph node metastases. Her past medical history was a history of thyroid nodules. She developed fatigue, rash, and progressive fever (>38°C) after 15 days starting ribociclib and was hospitalized due to uncontrolled fever.

Management and Outcome: Naranjo Algorithm calculated score 2 (Possible Adverse Drug Reaction). Bicytopenia (lymphocyte 500 $x10^3$/µL; monocyte 130 $x10^3$/µL; erythrocyte 3.7 $x10^6$/µL, haemoglobin 11.1 g/dl), hypertriglyceridemia (2067 mg/dl), erythrocyte sedimentation rate (ESR) was 80 mm/h, and bone marrow biopsy were consistent with hemophagocytosis on the hemogram. Tests for other infectious agents and other malignancies were negative. Rapid clinical and laboratory response to corticosteroid treatment was obtained. She was discharged from the hospital after the steroid dose was reduced and her fever, rash, and hemogram values improved completely. Ribociclib was discontinued although no such adverse events were reported in the preclinical and clinical phases.

Discussion: Probably drug-induced HLH is a diagnosis of exclusion, difficult to identify particularly for patients with cancer. Differential diagnosis includes genetic mutation, infections, autoimmune reaction, and other malignancies.

Keywords: *hemophagocytic histiocytosis, HLH, advanced breast cancer*

[Abstract:1357]

UNRAVELLING MUCO-CUTANEOUS ULCERS IN DERMATOLOGY: A CHALLENGING CASE

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Case Presentation: A 57-year-old woman with dyslipidaemia and recent medical follow-up due to mild anaemia and thrombocytopenia presented to the Emergency Department with fever, nausea, and intense vulvar pain. Despite prior treatment with clindamycin for vulvar lesions and leukorrhea observed during a recent gynaecological examination, her symptoms persisted. Physical examination revealed a body temperature of 40.2 °C, infracentimetric oral ulcers, and 1-to-1.5 cm wide, exophytic, friable, and painful vulvar ulcerated lesions with oedema, with non-palpable lymph nodes. In relation to the previous week, bloodwork disclosed a significant increase in C-reactive protein (from 2.96 to 36.49 mg/dL) and in procalcitonin (1.10 ng/dL), as well as in the total leukocyte count (from 5.9 $x10^9$/L to 40.8 $x10^9$/L).

Clinical Hypothesis: Hypotheses of pemphigus vulgaris, Behçet disease, HSV infection with bacterial superinfection, or a paraneoplastic dermatosis were proposed, leading to admission to the Dermatology ward for further investigation.

Diagnostic Pathways: The patient presented an increased sedimentation rate (70 mm/s), with a dubious positive pathergy skin test, but further studies ruled out infectious and autoimmune diseases. Histopathological analysis of a biopsied vulvar ulceration was consistent with neutrophilic dermatosis. The patient underwent bone marrow aspiration, which confirmed acute promyelocytic leukaemia (APL) with 29% promyelocytes.

Conclusions: Following the diagnosis of low-risk [t(15;17)] APL, the patient initiated chemotherapy with resolution of muco-cutaneous lesions. This case highlights the challenge of diagnosing atypical dermatological presentations and emphasizes the importance of considering haematological malignancies in such cases.

Keywords: *vulvar ulcers, muco-cutaneous lesions, paraneoplastic dermatosis, myeloproliferative diseases*

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[Abstract:1358]

THE FREQUENCY OF THYROID DYSFUNCTION OF PATIENTS DIAGNOSED WITH MALIGNANT MELANOMA, NON-SMALL CELL LUNG CANCER, RENAL CELL CARCINOMA AND ON NIVOLUMAB TREATMENT: A SINGLE CENTER EXPERIENCE

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Purpose: The aim of this study is to investigate the frequency of thyroid dysfunction of patients on nivolumab treatment with a diagnosis of malignant melanoma, NSCLC, renal cell carcinoma who applied to Samsun Training and Research Hospital Medical Oncology clinic.

Methods: The data of 88 patients on nivolumab treatment with the aforementioned diagnoses in Samsun Training and Research Hospital Medical Oncology Clinic between 01.01.2021 and 01.12.2022 were examined through the patient files and hospital automation system.

Results: 67 of the patients were diagnosed with NSCLC, 14 with malignant melanoma, and 7 with renal cell carcinoma. Thyroid dysfunction was observed in 14 patients (15.9%) in the 4th week of treatment, 2 patients in the 8th week of treatment, and in 9 patients in the 12th week of treatment. The final frequency of thyroid dysfunction at the end of the study was 28.4 %. When the frequencies of thyroid dysfunction between the three cancer groups were compared, it was seen that the only statistically significant difference between the cancer groups was between NSCLC and RCC in the 4th week of treatment. The patients were divided into two groups as those who developed thyroid dysfunction due to nivolumab treatment within 12 weeks and those who did not. The comparison of these two groups in terms of age, gender, disease duration, nivolumab treatment duration, and comorbidities, no statistically significant difference was found.

Conclusions: Nivolumab treatment may cause thyroid dysfunction independent of the diagnosis. This should be kept in mind during the patient follow-up.

Keywords: *nivolumab, cancer immunotherapy, thyroid dysfunction*

[Abstract:1363]

FROM LIVER NODULE TO LUNG ADENOCARCINOMA

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

A 74-year-old female patient with a history of dyslipidaemia was referred to the Emergency Department due to nausea, anorexia, asthenia and abdominal discomfort lasting 2 weeks. In addition, she reported weight loss of 2 kg in 1 month. Analytically, normocytic, normochromic anaemia. An abdominal ultrasound was performed which revealed chronic hepatopathy, probable hepatic haemangioma measuring 13x13 mm in segment VIII and a small volume of left pleural effusion. In this sense, she performed a thoracic CT scan which revealed a small pleural effusion on the left, apparently septate. In the images that partially covered the upper abdomen, multiple hypodense hepatic nodules were identified, which in the context suggest the possibility of secondary lesions. A thrombus was also found, resulting in a marked reduction in the permeability of the branch of the right inferior lobar artery. Completed a study with CT-abdomino pelvic valuing the presence of hepatic nodules (the largest measuring 1.8 cm) and splenic nodules (the largest measuring 0.8 cm). In this sense she performed a biopsy on a 1.8 cm hepatic nodule whose histological results revealed liver metastasis from primary lung adenocarcinoma, tubulo-glandular pattern with desmoplastic stroma. A PET-CT scan was also performed, which concluded that there was a hypermetabolic focus in the left lower lobe (and right lower lobe), suspected of malignant neoplastic involvement of high metabolic level. She also underwent an NGS study with ALK fusion, variant 3a/b. In this sense, she was guided to an Oncology consultation where she began first-line treatment with Alectinib 600 mg 12-12h.

Keywords: *liver nodule, lung adenocarcinoma, pulmonary thromboembolism*

[Abstract:1365]

NECROTIZING PNEUMONIA: AN INDICATIVE MARKER FOR LATENT LUNG CANCER

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Case Description: A 59-year-old male, with a history of smoking and no other notable medical background, presented with syncope. During the anamnesis, the patient reported purulent sputum without fever, and analytically, elevated acute phase reactants were observed. A chest computed tomography (CT) revealed bilateral cavitated pulmonary lesions. Subsequent

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sputum culture identified *Klebsiella aerogenes*, raising suspicion of necrotizing pneumonia in the context of syncopal symptoms. Tuberculous infection and septic embolisms were ruled out. Following a full course of antibiotic treatment, the patient showed favourable evolution, with resolution of most lesions, except for the largest one in the middle lobe.

Hypothesis and Diagnostic Pathways: Considering the patient's history of smoking and recent weight loss, a positron emission tomography-computed tomography (PET-CT) scan was performed to exclude an underlying neoplasm. The residual lesion was characterized as hypermetabolic, strongly indicative of malignancy. This diagnosis was confirmed through biopsy, revealing squamous cell carcinoma. Subsequently, the tumour was surgically resected.

Discussion: The incidental discovery of cavitated lung lesions presents a broad range of potential diagnoses. In the context of an infectious process, it is essential to initially rule out necrotizing pneumonia and lung abscesses due to their immediate severity. Furthermore, pulmonary neoplasms can manifest as cavitated lesions resembling abscesses, necessitating consideration as an alternative diagnostic possibility. In our specific case, the challenge lies in distinguishing malignant lesions underlying infectious processes, given the potential for intercurrent or superimposed infections. In conclusion, we underscore the significance of radiological follow-up for cavitated lesions to detect concealed neoplasms within residual lesions.

Keywords: *pneumonia, lung cancer, follow-up.*

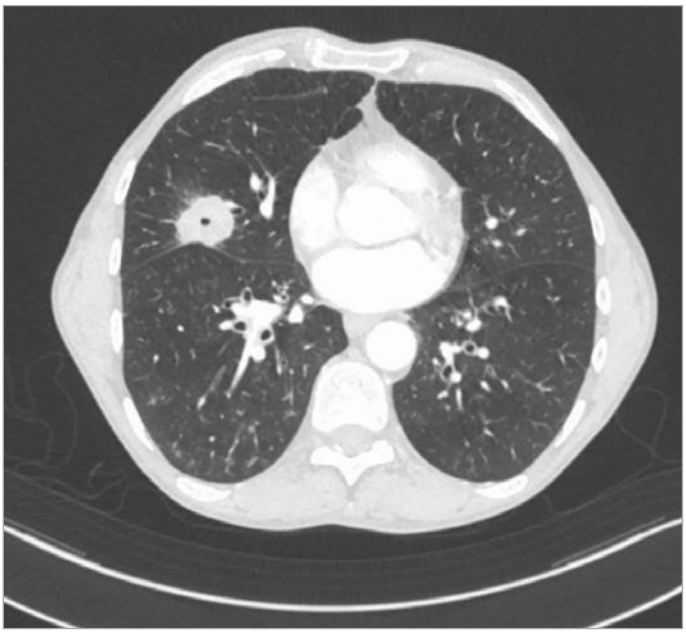

Figure 1. *Chest computed tomography of the lesion.*
The residual lesion in the chest computed tomography.

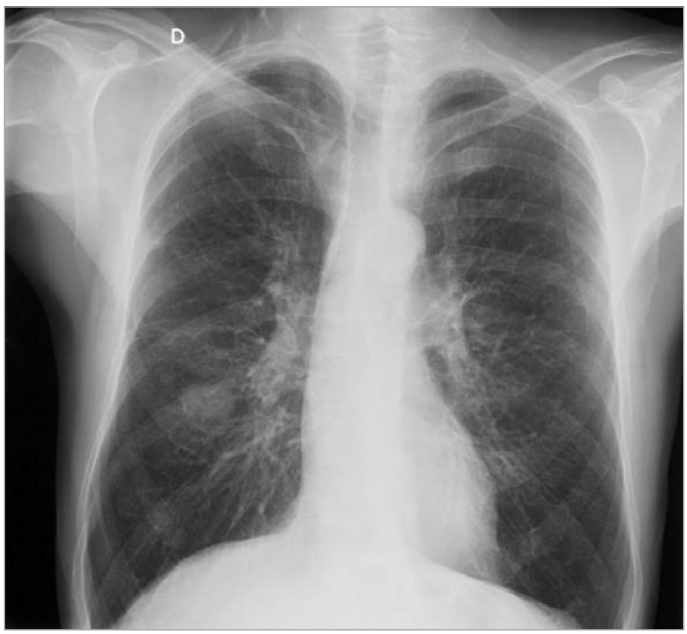

Figure 2. *Chest X-ray of the lesion.*
The image shows the residual lesion in a chest X-ray.

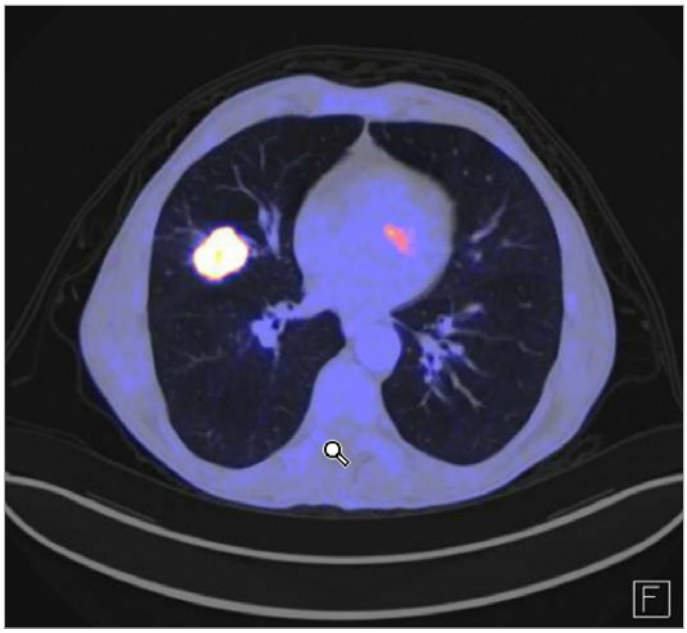

Figure 3. *PET-CT of the lesion.*
The image shows the enhancement of the residual lesion in the PET-CT scan.

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[Abstract:1373]

A CASE OF SPINAL PARAGANGLIOMA PRESENTING WITH AN INTRADURAL MASS

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Spinal paragangliomas are rare neoplasms which have an insidious onset, present with progressive back pain and neurological symptoms. Unlike secretory paragangliomas invasive tendencies are rare, and spinal paragangliomas are mostly amenable to complete cure by total resection. The diagnosis is made by capturing the Zellballen pattern of trabecular cords in the pathology specimens. We present a case of spinal paraganglioma in a patient, who had differential diagnosis of other dural tumours, such as ependymoma, which often requires adjuvant chemoradiotherapy while true non-secretory paragangliomas follow a mostly benign course after complete resection. Our aim is to impress upon the importance of revision of pathological specimens in the diagnosis of dural masses.

Keywords: *spinal paraganglioma, dural mass, Zellballen*

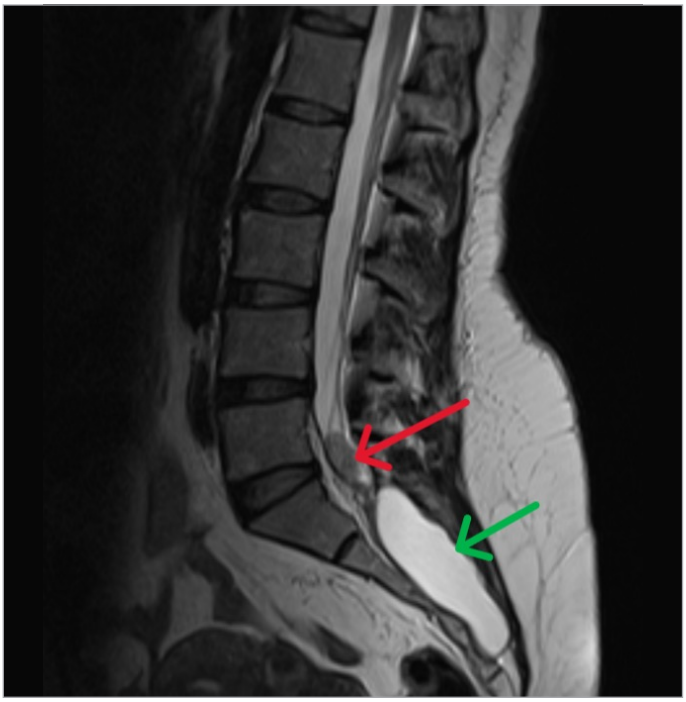

Figure 1. *T2 sequence of contrast enhanced lumbar MRI featuring an oval shaped dural mass (red arrow) and a meningocoele (green arrow).*

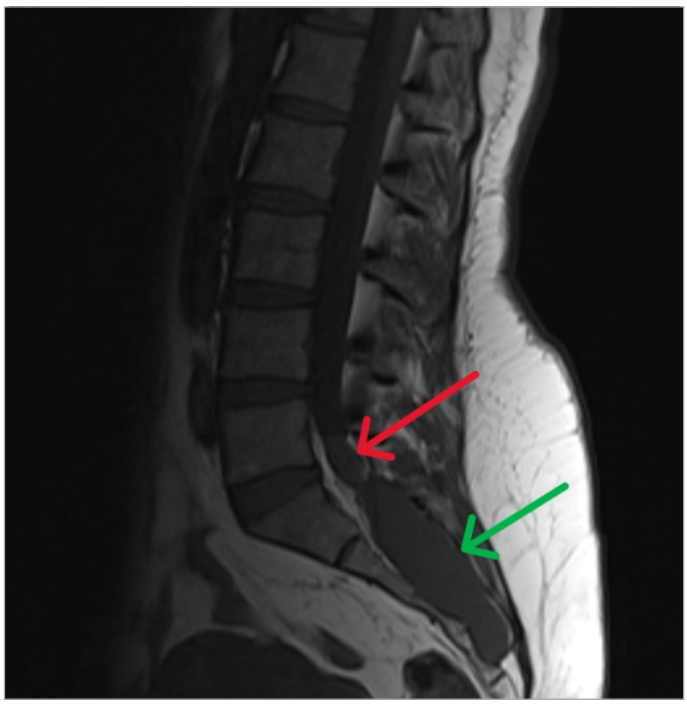

Figure 2. *T1 sequence of contrast enhanced lumbar MRI featuring an oval shaped dural mass (red arrow) and a meningocoele (green arrow).*

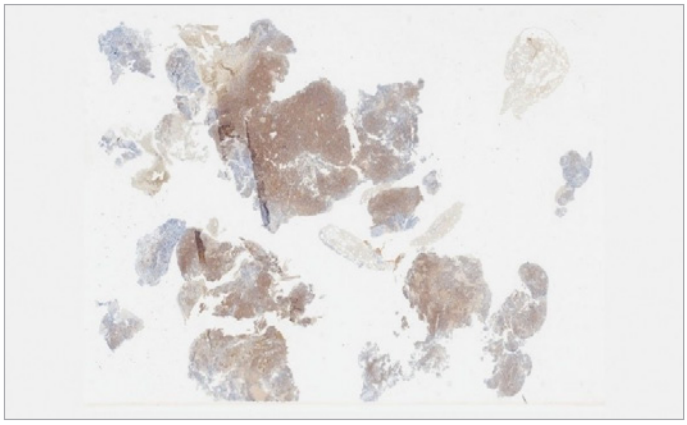

Figure 3. *S100 positive Paraganglioma.*

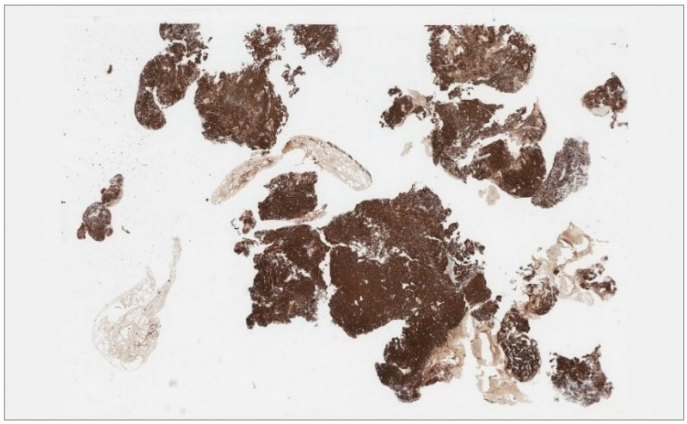

Figure 4. *Synapto-positive Paraganglioma.*

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[Abstract:1412]

ACQUIRED HAEMOPHILIA: A CASE REPORT

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Introduction: Acquired haemophilia (AH) is a haemostasis disorder caused by the presence of inhibitory autoantibodies directed against coagulation factor VIII. Its incidence is low, 1.5 cases/million inhabitants/year and its mortality is 30%. Clinically it is manifested by spontaneous bleeding mainly in the skin and soft tissues. Associated causes exist, such as neoplasms, autoimmune diseases or pregnancy, but up to 60% occur idiopathically in the elderly. The diagnosis is confirmed by a prolonged aPTT, normal prothrombin and plasma activity of FVIII <50% together with the presence of its inhibitor. Plasma administration does not correct the dysfunction. Treatment is based on hemostatic measures, immunosuppressants and treatment of the underlying cause. Remission is achieved in 70% of cases.

Case Presentation: 80-year-old woman with a history of Parkinson's disease came to the emergency department for large haematomas on upper and lower limbs attributed to falls. She requires multiple transfusions due to recurrent anaemia secondary to hematomas and bleeding from catheterization points. She also takes acetylsalicylic acid 100 mg. The analysis shows: Hb: 6.1 g/dL, PT: 100%, INR: 0.97, APTT: 98.4 s, APTT ratio: 3.28. Lupus anticoagulant negative, FVIII activity: 0%. Treatment was started with methylprednisolone 1 mg/kg/d in a tapering regimen and weekly Rituximab for 4 weeks. Clinical remission was achieved with disappearance of hematomas and normalization of coagulant factor VIII.

Conclusions: Acquired haemophilia is a rare haemostasis disorder that should be suspected in patients with extensive hematomas without previous coagulopathies. Secondary causes must be thought since treatment is key to the patient's evolution.

Keywords: *haemophilia, VIII factor, haemostasis disorder*

[Abstract:1413]

MULTICENTRIC CASTLEMAN'S DISEASE AND TAFRO SYNDROME. A CASE REPORT

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Introduction: Castleman's disease is a rare lymphoproliferative disorder characterized by the involvement of the lymph nodes and that presents as single-centric, multicentre idiopathic (iMCD) or multicentric disease associated with Kaposi's sarcoma-herpesvirus. Patients may remain asymptomatic or have compressive or systemic symptoms. Mediastinal lymphadenopathy, abdominal pain, anaemia, fatigue, or weight loss are frequent findings. Cough and generalized lymphadenopathy are also occasionally found. There are also unusual forms of presentation, such as described in the present case.

Case Presentation: 23-years-old man comes to the emergency room with cough, dyspnoea, anorexia with night sweats lasting two weeks. Anasarca is visible, with pleural and pericardial effusion, requiring drainage due to respiratory failure. The analysis detects: Hb: 7.6 g/dL, platelets: 48,000/mm^3, creatinine 1.8 mg/dL, ferritin: 989 mg/dL, IL-6: 246 pg/mL, HIV-Ab and HHV-8: negatives. Total body CT showed hepatosplenomegaly and multiple small periparotid, laterocervical, axillary retroperitoneal and inguinal hypervascular lymphadenopathies. Lymphadenopathy cytology showed abundant vessels and small hyperchromatic lymphocytes. Immunohistochemical techniques showed positivity for CD3, CD4, CD5, CD8, PD1 and CD20 An excisional biopsy confirms the diagnosis: hyaline-vascular Castleman´s disease. Initial treatment consists of bolus methylprednisolone and siltuximab. maintenance was done with prednisone and siltuximab (10 cycles). The clinical and analytical response is complete, except that the adenomegalies does not disappear completely.

Conclusions: TAFRO syndrome (thrombocytopenia, anasarca, myelofibrosis, renal dysfunction and Organomegaly) often occur y patients with iMCD. These cases often have mixed or hypervascular (hyaline-vascular) histopathologic features. The prognosis is variable: an indolent form, an episodic relapsing form or a rapidly progressive life-threatening form.

Keywords: *Castelman's disease, TAFRO syndrome*

[Abstract:1420]

NON-CIRRHOTIC PORTAL HYPERTENSION IN FEMALE PATIENT WITH POLYCYTHEMIA VERA

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Case Description: A 72-year-old female, with previous history of myocardial infarction and breast cancer, and multiple hospital admissions due to suspect of cryptogenic liver cirrhosis, was admitted with dyspnoea, itchy skin, and abdomen enlargement within two months of evolution. While examination inguinal lymphadenopathy, swelling of legs, ascites, splenomegaly were revealed. Initial laboratory tests were remarkable for leukocytosis (21.8x10^9/l), thrombocytosis (580x10^9/l), Hb 145 g/l. Abdominal computed tomography showed hepatosplenomegaly, portal and

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spleen vein thrombosis, ascites. Esophagogastroduodenoscopy demonstrated oesophageal varices Paquet III.

Clinical Hypothesis: differential diagnosis between primary liver disease and myeloproliferative disorder.

Diagnostic Pathways: Laboratory investigations revealed: hyperuricemia 423 µmol/l, ALP 339 IU/l, serum iron 6.4 µmol/l, ferritin 76 µg/l, LDH 1073 U/l, B12 655 pg/ml, erythropoietin < 1.0 mIU/ml, albumin 36.0 g/l, AST 46 IU/L, ALT 25 IU/L, gGT 28 IU/L. A bone marrow biopsy confirmed a hypercellular marrow with trilineage haematopoiesis and abnormal megakaryocytes consistent with myeloproliferative neoplasm. *JAK2V617F* gene mutation was positive. Based on these findings, the diagnosis of polycythemia vera (PV) with non-cirrhotic portal hypertension was established and hydroxyurea treatment was initiated.

Discussion and Learning Points: Chronic portal vein thrombosis from PV may be characterized by clinical features of portal hypertension including oesophageal varices. Some of patients with PV can present with normal haemoglobin and haematocrit levels due to either dilution of the blood or coincidental blood loss anaemia. PV should be considered in the differential diagnosis of portal hypertension of unknown cause.

Keywords: *polycythemia vera, portal hypertension, myeloproliferative disease*

[Abstract:1443]

PEMBROLIZUMAB INDUCED SARCOID-LIKE REACTION AND MESENTERIC PANNICULITIS IN A NON-SMALL CELL LUNG CANCER PATIENT

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Treatment of metastatic non-small cell lung cancer has undergone a major change in the last 10 years, largely due to the advent of immunotherapy. Anti PD1 agents such as pembrolizumab have increased the median survival of these patients from 13 to 26 months. Most frequent immunorelated side effects are hypothyroidism, pneumonitis or elevated liver enzymes. However, there are other adverse effects, including sarcoid like reaction and mesenteric panniculitis, which should be known by the professionals involved in the diagnosis and treatment of this type of patient.

We present the case of a 62-year-old man with a history of unresectable stage IIIB epidermoid lung carcinoma with a PD-L1 expression of 30% in whom pembrolizumab was discontinued after 4 cycles due to immunorelated arthritis. One year later he consulted for severe abdominal pain. A PET-CT scan was performed, showing mediastinal lymphadenopathy and inflammation of abdominal mesenteric fat. A biopsy of lesions in both areas showed non-necrotizing granulomatous lymphadenitis in mediastinal adenopathy and patchy fibrosis of mesenteric fat. The picture was classified as sarcoidosis-like reaction and mesenteric panniculitis secondary to pembrolizumab.

Anti-PD1 agents cause hyperactivation of the immune system through T-cell proliferation. Sarcoid-like reaction is a very rare complication that can mask progressive tumour disease. Awareness of immunorelated complications by oncologists, internists and radiologists is important for an appropriate diagnostic approach and targeted test ordering.

Keywords: *sarcoid like reaction, lung cancer, panniculitis, immunotherapy, toxicity*

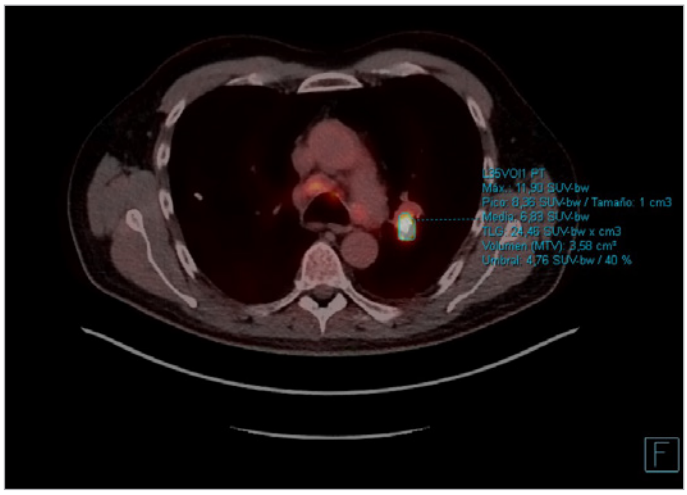

Figure 1. *Sarcoid-Like reaction.*
Mesenteric adenopathy with pathologic uptake in the context of sarcoid like reaction.

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[Abstract:1452]

SURVIVAL AND RESPONSE TO TREATMENT IN PATIENTS DIAGNOSED WITH ACUTE MYELOID LEUKAEMIA RECEIVING HYPOMETHYLATING AGENT MONOTHERAPY OR PATIENTS RECEIVING HYPOMETHYLATING AGENT AND VENETOCLAX COMBINATION THERAPY

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Aim: Venetoclax, a BCL2 inhibitor, has been shown to induce apoptosis in malignant cells that depend on BCL2 for survival. In our study, we aimed to compare the overall survival of rates of the patients, receiving hypomethylating agent (azacytidine or decitabine) treatment, and patients receiving hypomethylating agent (azacytidine, decitabine) treatment plus venetoclax treatment.

Materials and Methods: We recorded demographic data including age and gender, of 70 patients who could not receive intensive induction chemotherapy (unfit), low performance scores or elderly patients and who were diagnosed with AML (non-M3) according to the WHO 2016 diagnostic criteria, aged 60 and over and/or considered unfit, between 2016 and 2022, at the haematology clinic of the University of Health Sciences Istanbul Training and Research Hospital. Subgroups, responses to the treatment received, presence of relapse, and survival times were evaluated.

Findings: The patient's final medical condition was significantly correlated to treatment choice. While the mortality rate of the patients who received HMA (AZA/DES) was 94.3%, it was 65.7% for those given HMA+venetoclax. A significantly higher risk of death was observed [(1.89 times higher (1.09-3.31)] in patients given HMA (AZA/DES) than in those given HMA+venetoclax (p=0.02).

Conclusions: The survival rate of AML patients that are not suitable to receive intensive therapy, due to advanced age or poor medical condition, and who received (azacytidine, decitabine) + venetoclax combination therapy was significantly better compared to AML patients that received HMA (azacytidine, decitabine) treatment.

Keywords: *acute myeloid leukaemia, venetoclax, survival*

	Non-survival n(%)	Survival n(%)	Median Survival(month) (% 95 CI)	Hazard Ratio (% 95 CI)	Log Rank p value
Treatment					
HMA AZA/DES	33(94,29)	2(5,71)	5month(2-10)	1,89 (1,09-3,31)	0,02
HMA+VENETOCLAX	23(65,71)	12(34,29)	9month(7-21)		
Overall	56(80)	14(20)	7month(5-11)		

Table 1. *Comparison of Survival Curves (Logrank test) and Hazard ratio (HR).*

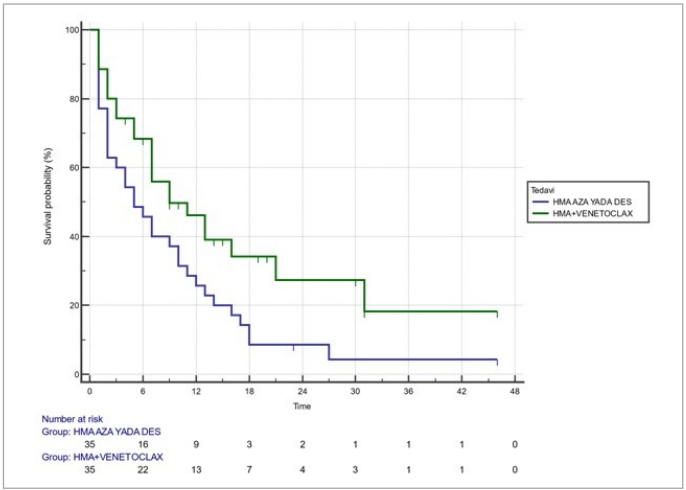

Figure 1. *Diagram of life probabilities (%) versus time.*

[Abstract:1459]

A CASE OF CHRONIC THROMBOTIC THROMBOCYTOPENIC PURPURA

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Summary: Thrombotic thrombocytopenic purpura (TTP) is an acute multisystemic syndrome characterized by microangiopathic haemolytic anaemia (MAHA) and thrombocytopenia. It may manifest with renal failure, neurological impairment and fever. Patients with MAHA and thrombocytopenia should be treated as TTP until proven otherwise, necessitating immediate intervention. Plasma exchange is the most effective treatment, continues until the platelet count is above $150x10^9$/L for 2 days. We present a patient who has been investigated for bicytopenia for 6 months and diagnosed with TTP.

Case Presentation: A 42-year-old male with epilepsy, presented to the emergency department with headache and weakness. Patient had hepatosplenomegaly and bicytopenia. 8 months ago, the patient was hospitalized for bicytopenia that progressed to pancytopenia and improved with prednisolone. Two months later, non-immune haemolytic anaemia and thrombocytopenia recurred. Bone marrow aspirations, testing for PNH yielded no diagnosis. Patient experienced intermittent confusion during follow-up. Neurological imaging were normal. Comparing old

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and new peripheral smears revealed schistocytes. Suspecting TTP, tests confirmed low ADAMTS13 and high inhibitor levels. Urgent plasmapheresis led to improvements in blood tests and consciousness status.

Discussion: TTP is rare, once had a mortality rate of 90%, but plasma exchange has reduced it to 4-31%. This case highlights a 6-month period without major bleeding with minor neurological deficits masked by epilepsy, without receiving plasmapheresis treatment. TTP effects morbidity with risks of hypertension, cognitive abnormalities, etc. Recurrence, observed in one-third of patients post-treatment.

Conclusions: Thrombocytopenia and MAHA should prompt consideration of TTP, requires immediate treatment. Recurrence risk, emphasizes the importance of long-term monitoring.

Keywords: *thrombotic thrombocytopenic purpura, microangiopathic haemolytic anaemia, plasmapheresis*

[Abstract:1462]

FEVER OF INTERMEDIATE DURATION AND TRANSFUSIONAL-RANGE ANAEMIA. ARE WE MISSING SOMETHING?

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A 22-year-old woman with a family history of her father having lymphoblastic non-Hodgkin Lymphoma, antiphospholipid syndrome, and deceased due to Leishmania infection. She is admitted due to a one-month history of fever after EBV infection and intense asthenia. She denies foreign travel, risky sexual relations, or contact with rural areas. Blood analysis reveals macrocytic anaemia (Hb 7.6 g/dl, MCV 111 fL), monocytosis 1600/L, thrombocytopenia 100,000, hypertriglyceridemia 670 mg/dl, CRP 60 mg/L, hyperferritinemia 3104 ng/ml, elevated LDH 329 U/L, and vitamin B12 deficiency (189 pg/ml). An abdominopelvic CT scan is requested, showing hepatosplenomegaly.

During hospitalization, poor clinical evolution despite starting treatment with Cyanocobalamin and folic acid, worsening anaemia (Hb 6.9 g/dl), thrombocytopenia (90,000), and persistent fever. Serologies for EBV positive, CMV, toxoplasmosis, leishmania, HCV, HBV, HAV, and HIV negative; normal autoimmunity. Bone marrow aspiration reveals histiocytes and hemophagocytosis, diagnosing hemophagocytic lymphohistiocytosis (HLH) according to HLH-2004 criteria (6 out of 8 criteria) related to past EBV infection without evidence of associated lymphoproliferative syndrome. Treatment with dexamethasone (10mg/m^2 per day) is initiated, achieving clinical improvement, fever disappearance, and improved blood parameters with Hb 10.5 g/dl and platelets 330,000 g/dl. HLH is an aggressive and potentially life-threatening syndrome caused by dysfunction in the cytotoxic T lymphocytes and natural killer cells, leading to an uncontrolled immune response with hyperactivation and excessive proliferation of macrophages. A high clinical suspicion is necessary due to the low frequency of the syndrome, the variability in clinical presentation, and the lack of diagnostic specificity to achieve successful early treatment.

Keywords: *fever, cytopenia, hemophagocytic lymphohistiocytosis*

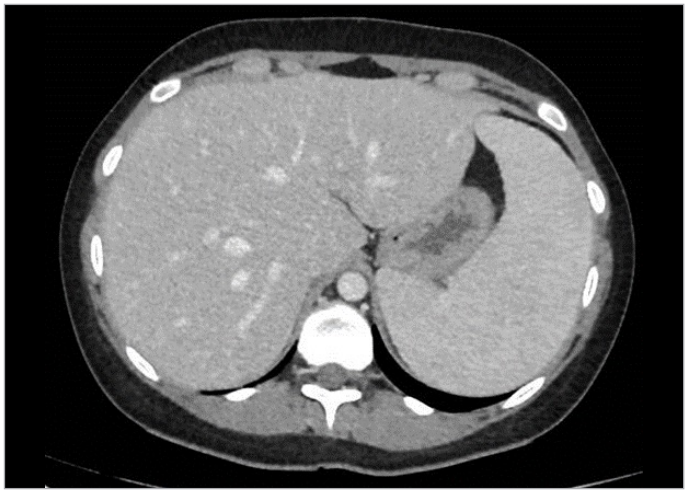

Figure 1. *Abdominopelvic CT scan. It shows hepatosplenomegaly.*

[Abstract:1486]

FROM SHOULDER PAIN TO A NEOPLASIA DIAGNOSIS - A CLINICAL CASE

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A 48-year-old woman, with no relevant history, went to the Emergency Room with shoulder pain, accompanied by constitutional symptoms (asthenia, anorexia and involuntary weight loss of 7 kg in the last 2 months). Physical examination showed no relevant findings, and blood work up was normal, but due to persistent complaints of right omalgia, she underwent thoracic computed tomography (CT) that showed an image compatible with heterogeneous filling of the anterior mediastinum. Taking these findings into account the patient was admitted to the ward for further evaluation. A cervico-thoraco-abdomino-pelvic CT scan was performed, which confirmed the previously known mass in the anterior mediastinum, without other distant lesions. Tissue was obtained with percutaneous biopsy, and pathological anatomy confirmed the diagnosis of primary B large cell lymphoma of the mediastinum (thymus). She was transferred to the Clinical Hematology Service for continuation for of care and treatment orientation. This patient had already been previously evaluated in primary health care and even in an emergency context

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due to complaints of right shoulder pain, which were treated symptomatically. In fact, most of the times these complaints fall within acute osteoarticular conditions, however, taking into account other findings, such as her constitutional syndrome, this meant that other diagnostic options had to be considered and studied.

Keywords: *shoulder pain, lymphoma, neoplasia*

[Abstract:1529]

UNUSUAL OVARIAN VEIN THROMBOSIS: A CASE REPORT AND REVIEW OF THE LITERATURE

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Introduction: Ovarian vein thrombosis (OVT) is an uncommon but potentially serious clinical disorder, which mostly present in the postpartum period but can also occur with malignant and inflammatory conditions in the non-obstetrical patient. The diagnosis is mainly based on imaging techniques, in particular computed tomography (CT) and magnetic resonance, for their sensitivity and specificity.

Case Presentation: We present a case of a 56-year-old female who was diagnosed with metastatic lung carcinoma. Her abdominal contrast-enhanced CT revealed a right ovarian vein thrombosis.

Conclusions: We describe this case of OVT, because, even though rare, it is a diagnosis to consider. Prompt recognition and treatment are crucial to avoid more severe outcomes.

Keywords: *cancer, computed tomography, ovarian vein thrombosis*

[Abstract:1563]

VENA CAVA SYNDROME. CLINICAL CASE AND BIBLIOGRAPHIC REVIEW

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A 57-year-old man, smoker of 45 packs/year, consulted his family physician for facial oedema, and was treated with steroids for one month (methylprednisone 0.5 mg/kg/day) without improvement.

She consulted for the appearance of dysphonia, dyspnoea at mid-effort (NYHA II/IV) and persistent facial oedema. She was admitted with a suspected diagnosis of superior vena cava syndrome and associated constitutional syndrome.

Radiological study was performed by chest X-ray which showed paratracheal alveolar paratracheal occupation image, extending the study by computed axial tomography with contrast that confirmed right paratracheal adenopathic conglomerate compressing vena cava, oesophagus and pathological thrombosis of the most proximal segment of the vein, and multiple liver metastases. Urgent radiotherapy was performed, dexamethasone at 8 mg/6 hour intravenous and heparin at therapeutic dose was started.

A few days later, the patient began to present neurological symptoms (left facial paralysis and MSI weakness), and a cranial tomography was performed, which showed multiple cortical space-occupying lesions with haemorrhagic transformation.

In view of the generalized deterioration, a CT-guided biopsy of the lung lesion was obtained for anatomopathological study with the result of poorly differentiated non-small cell carcinoma.

Palliative treatment was decided with 3 sessions of radiotherapy and one session of carboplatin-paclitaxel 85% chemotherapy and after clinical stability it was decided to discharge the patient with home palliative follow-up.

Superior vena cava syndrome is the set of signs and symptoms derived from the obstruction of this vein. Malignant neoplasms are the main cause, the most frequent being lung cancer, by direct invasion or external compression.

Keywords: *syndrome, vein, cava, oedema, dysphonia, dyspnoea*

[Abstract:1579]

THE NEW ENEMY OF CANCER PATIENTS, IMMUNOTHERAPY-ASSOCIATED ADVERSE EVENTS: A CASE REPORT OF PNEUMONITIS MIMICKING PNEUMONIA

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A 57-year-old male with a non-small cell lung cancer (NCSLC) was presented to emergency department with dyspnoea and fever. Oxygen requirement developed and broad-spectrum antibiotic therapy were initiated after the first thoracic computed tomography (CT) was evaluated as pneumonia. There were no positive findings in infectious parameters during follow-up and no improvement in oxygen requirement despite antibiotic treatment. Considering that the patient received pembrolizumab treatment three weeks ago, immunotherapy-associated pneumonitis was diagnosed and steroid (1.5 mg/kg) treatment was initiated. The patient's oxygen requirement decreased significantly with steroid therapy. The patient was discharged with a 6-week steroid taper plan.

Immunotherapy-associated pneumonitis should be considered in patients on active immune check point inhibitor therapy after ruling out possible infectious agents in the event of sudden oxygen demand. While thoracic CT was helpful in the diagnosis,

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the decrease in oxygen requirement after steroid treatment and improvement in control imaging supported the diagnosis of immunotherapy-associated pneumonitis.

The use of immune check point inhibitors in the treatment of malignant diseases is becoming increasingly common. Pembrolizumab is a humanized monoclonal anti PD-1 (programmed cell death 1) antibody approved for the treatment of a wide range of tumours. Although it has a strong therapeutic effect, it may cause immune system related adverse effects such as hypophysitis, hepatitis and pneumonitis. When respiratory distress is observed in patients who have recently received immunotherapy, pneumonitis should be considered in the differential diagnosis.

Keywords: *pneumonitis, pembrolizumab, Immunotherapy*

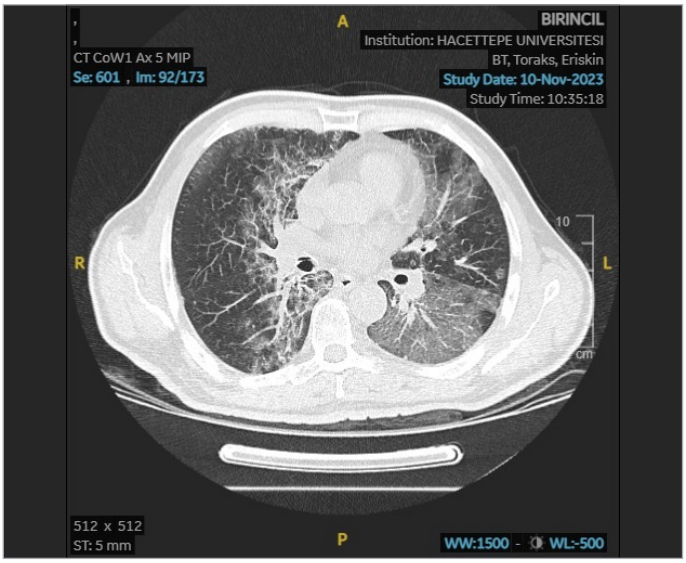

Figure 1. *Thoracic computed tomography.*
Diffuse most prominent patchy ground-glass opacities, inter-intralobular septal thickening and traction bronchiectasis in both lungs are in support of immunotherapy effect.

[Abstract:1581]

A RARE CAUSE OF SORE THROAT: A CASE REPORT OF BURKITT LYMPHOMA IN PALATINE TONSIL

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A 50-year-old female with a past medical history of type 2 diabetes mellitus, was presented to hospital with a complaint of sore throat. Fibreoptic imaging revealed swelling and whiteness in the left tonsillar region and excisional biopsy was performed. In immunohistochemical studies, neoplastic cells are diffusely positive. Ki-67 proliferation index is above 95%. A translocation involving the MYC gene was observed in the neoplastic cells and the pathologic diagnosis was reported as Burkitt lymphoma (BL). Tumour F-18 fluorodeoxyglucose (FDG) positron emission tomography (PET/CT) scan showed asymmetric thickening and intense FDG uptake in the left palatine tonsil maximum standardized uptake value (SUV max) was 21.4 (normal liver parenchyma, was 2,4). She received the R-EPOCH (rituximab, etoposide, prednisone, vincristine, cyclophosphamide, and doxorubicin) regimen and intrathecal methotrexate therapy as central nervous system prophylaxis.

Although peritonsillar abscess, tonsillitis, dental and gingival diseases are the first causes that come to mind in patients presenting with sore throat, the finding of an accompanying pathologic lymph node on examination and the presence of systemic complaints (B-symptoms) should remind us of BL.

PET-CT and excisional biopsy are the procedures that should be performed first in the diagnosis of lymphoma.

BL is one of the most aggressive and fast growing non-Hodgkin lymphomas. Misdiagnosis is highly possible because its presentation in the oral cavity is extremely rare. BL should be considered in the differential diagnosis in the presence of concomitant lymph nodes in the head and neck region and a mass in the tonsillar region.

Keywords: *Burkitt lymphoma, non-Hodgkin lymphoma, sore throat*

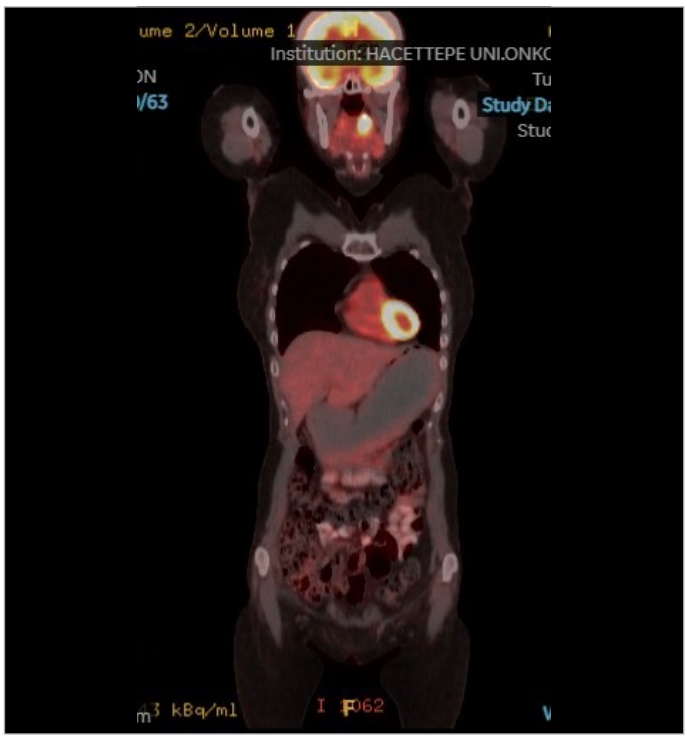

Figure 1. *PET/CT scan showed asymmetric thickening and intense FDG uptake in the left palatine tonsil.*

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[Abstract:1582]

A RARE CASE OF POSTPARTUM ACQUIRED HAEMOPHILIA WITH LATE ONSET

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Case Description: A 41-years-old woman with a history of caesarean delivery ten months ago presented with abdominal pain. She didn't have abnormal bleeding history. Her physical examination revealed a mass in the right lower quadrant. Computed tomography revealed intraabdominal hematoma of 83x63 mm in the right paracolic area and 45 mm in the right iliacus. In the laboratory tests, haemoglobin was 67 g/L and platelets were 267x10^9/L. Activated partial thromboplastin time (APTT) was 87seconds with normal prothrombin time (PT).

Clinical Hypothesis: Postpartum acquired haemophilia

Diagnostic Pathways: The APTT mixing test didn't reveal normalization at 5th and 120th minutes which indicated an antibody against clotting factors. Factor VIII and inhibitor levels were <0.7% and 85%, respectively. The patient was diagnosed as AH and the only documented cause was postpartum period. She as treated with activated factor VII and immunosuppressive therapy (IST-cyclophosphamide, methylprednisolone). The complete remission (CR) was obtained at 4th week and the IST was discontinued at the 10th week. She was still followed up in CR.

Discussion and Learning Points: Acquired haemophilia (AH) is a rare (1 in 1500000) and life-threatening bleeding disorder characterized by autoantibodies against coagulation factors mainly Factor VIII. It may be primary or may be due to secondary causes including malignancy, pregnancy, and autoimmune diseases. Postpartum AH is presented mostly after few months after delivery. But very rarely, it may present with late onset. This case was also a rare example for late onset AH in the post-partum period so detailed history is very important for the appropriate diagnosis and prevention of morbidities and mortalities.

Keywords: *acquired haemophilia A, postpartum acquired haemophilia, treatment of acquired inhibitor, factor VIII inhibitor, mixing test*

[Abstract:1635]

PANCREATIC PANNICULITIS AS A MANIFESTATION OF AN OCCULT PANCREATIC ADENOCARCINOMA

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Pancreatic panniculitis is an infrequent manifestation of pancreatic pathology, being reported in acute and chronic pancreatitis. However, it can also be the onset of a pancreatic neoplasm. The lesions may present during the course of pancreatic disorder or may be diagnosed before the underlying disease.

A 78-year-old woman was admitted due to a progressive edema and erythema in both lower limbs. The patient denied digestive symptoms, weight loss, asthenia or anorexia. On physical examination, erythematous plaques were observed in both pretibial regions (Fig 1). Analytical data at entry is shown in Table 1. A biopsy of the lesions was performed and confirmed the diagnosis of pancreatic panniculitis (Fig 2). An MRI cholangio-magnetic-resonance-imaging was performed, where a nodular image located in the uncinate process was observed. Tumour marker levels were requested, with sensitive levels for cardioembryonic antigen (CEA), 19.31 U/ml (<5) and normal levels for carbohydrate antigen 19-9 (CA 19.9), 1.4 U/ml (<37).

An endoscopic ultrasound and a biopsy of the lesion was performed. The pathology concluded with the diagnosis of pancreatic adenocarcinoma.

We want to highlight the importance of making a correct differential diagnosis of skin lesions in order to make an early diagnosis of an occult neoplasm. Furthermore, it is important to notice that tumour marker levels could be normal if the tumour burden is low. It can help us to make more likely the diagnosis of a neoformation and its origin, but it cannot be used for making or rule out the diagnosis.

Keywords: *pancreatic panniculitis, adenocarcinoma, pancreas*

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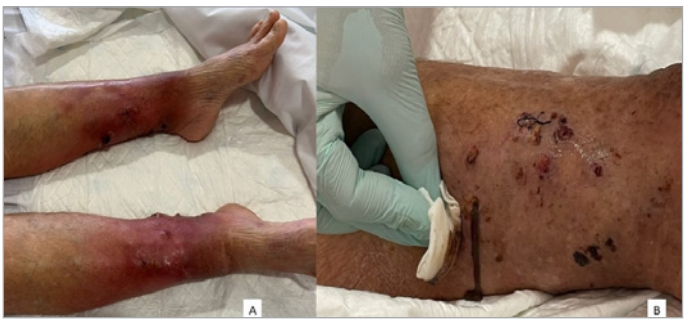

Figure 1. *A. Skin lesions during the first days of admission. Erythematous edematous plaques on both tibial regions, with vesicles and crust. B. Lesions after skin biopsy. Brown fluid exudate, compatible with oily material.*

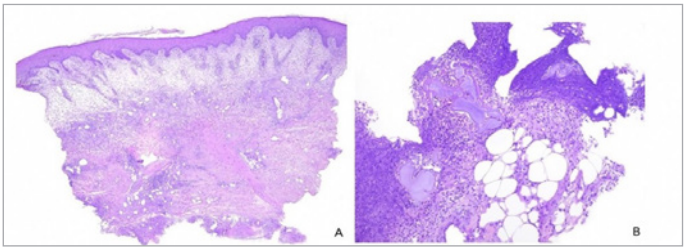

Figure 2. *A. Incisional/Punch biopsy. Edema in the superficial dermis and necrosis of subcutaneous tissue with abundant acute inflammation. Hematoxylin-eosin stain, magnification 2x. B. Enzymatic fat necrosis with saponification, polymorphonuclear cells, and cellular debris. Hematoxylin-eosin stain, magnification 10x.*

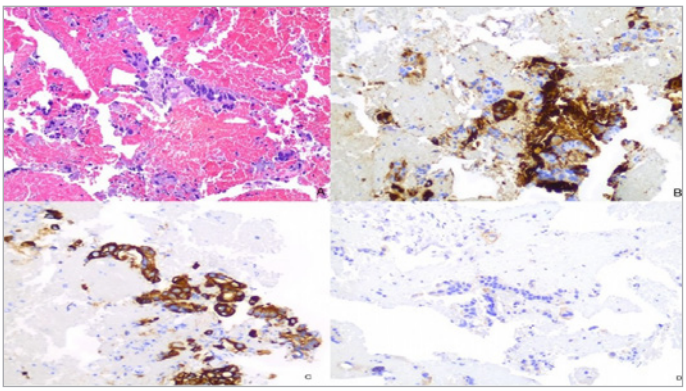

Figure 3. *A. Core needle aspiration biopsy with abundant red blood cells and presence of cells with marked pleomorphism and hyperchromasia. There is little formation of glandular lumens, compatible with adenocarcinoma. Hematoxylin-eosin stain, magnification 10x. B, C, D. Neoplastic cells show cytoplasmic immunoreactivity for CK7 (cytokeratin) and luminal immunoreactivity for CA19.9 (Carbohydrate antigen 19-9, as well as negativity for CK20. This immunohistochemical profile is compatible with pancreatic adenocarcinoma. Magnification 20x CK7, CA19.9 and CK20.*

Parameter	Patient data	Normal range
Haemoglobin (g/dl)	10.9	13-17.5
MCV (fl)	86	80-100
Platelets (x10^9/L)	358	140-450
Leukocytes (x10^9/L)	12.43	4.4-11.3
Neutrophils (x10^9/L)	10.28	1.8-7.7
Glucose	141	70-110
LDH (U/L)	278	120-246
CRP (mg/L)	172	<3
Lipase	1502	12-53
Amylase	1011	25-115

Table 1. *Laboratory data at admission.*

[Abstract:1665]

ANXIETY OUR GREAT ENEMY

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73-year-old woman, PE in 07/22 in the context of mild COVID-19 infection that did not require admission anticoagulated with eliquis and persistent depressive disorder that had worsened in the last year as a result of family problems.

She presents a two-week study of confusion with a tendency to disorientation and memory failures as well as abdominal pain. She was previously evaluated up to three times in the emergency room with a normal cranial CT scan and was discharged with a diagnosis of possible anxiety syndrome and abdominal somatization.

She was admitted due to clinical persistence despite adjustment of antidepressants and poor response.

On re-examination, she referred epigastric pain, nausea, and fever. Analytically, acute alteration of non-dissociated cholestasis profile as well as mild thrombopenia. Initially, a chest X-ray was performed with the presence of pleural effusion, and thoracentesis was performed, with negative cytology. Likewise, abdominal ultrasound is performed: acute hepatic LOES that show abscesses.

In order to expand the study and profile the aetiology of LOEs, an abdominopelvic CT was performed with evidence of a mass in the pancreatic tail suspicious for neoplasia as well as confirmation of multiple liver lesions compatible with metastasis and splenic infarction of > 50% with amputation of the splenic vein. Cholangio MRI shows haemangiomas and a mass in the pancreatic tail.

Given possible dissemination, brain MRI showed multiple subacute punctate infarcts and foci of leptomeningeal dissemination (despite LP with negative pathological anatomy).

Finally, endoscopy ultrasound provides us the final diagnosis of pancreatic adenocarcinoma.

Keywords: *adenocarcinoma, pancreatic, depression, abdominal pain, confusion*

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[Abstract:1677]

IGM AMYLOIDOSIS AS A RARE CAUSE OF CONSTITUTIONAL SYNDROME: A CASE REPORT

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A 78-year-old male with significant personal history of tobacco use and chronic alcoholism with recent abstinence presented with a constitutional syndrome with substantial weight loss over a 5-month period. In the last month, he also developed right-sided heart failure, atrial fibrillation with low voltages in electrocardiogram and a concurrent episode of diarrhoea and rectal bleeding. Main laboratory findings were mild normocytic normochromic anaemia, fluctuating mild neutropenia, slight elevation in C-reactive protein, beta-2 microglobulin at 6.67 mg/L (<2.00), significant elevation in immunoglobulin IgM at 3110 mg/dL (34 – 210), elevated kappa light chain at 113 mg/dL (3.30 – 19.40) and a serum proteinogram showing a monoclonal peak of IgM kappa (380 mg/dL). Renal function and lactate dehydrogenase values were within normal limits and the microbiology studies were negative. A thoracoabdominopelvic computed tomography revealed significant mesenteric and epigastric retroperitoneal adenopathies. A transthoracic echocardiogram showed a normal left ventricle, biauricular dilatation, dilated right ventricle with limited systolic function and severe tricuspid regurgitation, along with granular speckling appearance of the myocardium. Given the presence of lymphadenopathy syndrome, IgM kappa monoclonal gammopathy and infiltrative myocardial pattern we performed further investigation to exclude hematologic malignancy. A bone marrow study confirmed a diagnosis of Waldenstrom's macroglobulinemia and the colonoscopy biopsies, conducted to study diarrhoea, revealed colorectal amyloidosis. Therefore, the patient was diagnosed with immunoglobulin light chain (AL) amyloidosis, IgM subtype, secondary to Waldenstrom's macroglobulinemia. The patient suffered from both colorectal and probably cardiac IgM amyloidosis, although cardiac magnetic resonance did not conclusively indicate restrictive cardiomyopathy.

Keywords: *IgM amyloidosis, Waldenstrom's macroglobulinemia, constitutional syndrome*

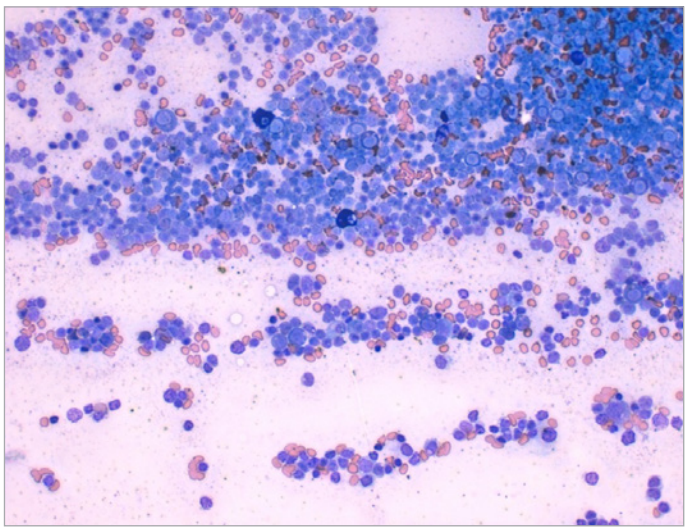

Figure 1. *Bone marrow biopsy (20x). This picture shows a bone marrow that is hypercellular for the patient's age, with a monomorphic cellular infiltrate consistent with lymphoplasmacytic lymphoma or Waldenstrom macroglobulinemia.*

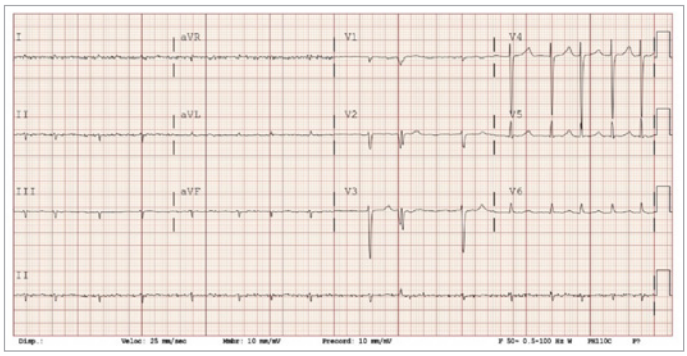

Figure 2. *Electrocardiogram. Atrial fibrillation and peripheral leads with low voltages, usual electrocardiographic manifestations of cardiac amyloidosis.*

[Abstract:1684]

EPOPROTEIN PRODUCTION RELATED POLYCYTHEMIA IN PATIENTS WITH RCC

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Introduction: The kidney is an organ that produces important substances such as renin, 1,25-Dihydroxyvitamin D3, erythropoietin (EPO) and prostaglandins. In Renal cell carcinoma (RCC), EPO release may be increased by tumour tissue or secondary to hypoxia due to tumour pressure. Despite this, anaemia is often observed in patients. This case report describes polycythaemia due to EPO production from tumour tissue in a patient with RCC.

Case Presentation: Abdominal ultrasonography performed in

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the outpatient clinic control of a 39-year-old male patient who complained of weight loss revealed a heterogeneous, solid lesion measuring 93x85 mm in size, in the middle-lower localization of the right kidney. The results of the tru-cut biopsy taken from this lesion were found to be consistent with clear cell RCC. The patient was treated with systemic chemotherapy. The EPO level, evaluated in response to the polycythaemia developed during the follow-up period, was found to be 74.5 mIU/mL (Upper limit: 29 mIU/mL). Referred back to oncology, a detailed examination revealed metastatic lesions in the brain, lungs, and liver. Radiotherapy and targeted treatment have been planned for the patient.

Conclusions: Paraneoplastic syndromes are emerging as important factors in the diagnosis and follow-up of tumours. Polycythaemia associated with EPO production in patients with RCC has been described in the literature. In this case report, EPO levels were found to be elevated in a patient diagnosed with RCC-associated polycythaemia and subsequent follow-up revealed that the RCC was metastatic. In conclusion, paraneoplastic EPO increase should be considered in oncologic diseases with polycythaemia.

Keywords: *RCC, EPO, polycythaemia*

[Abstract:1719]

DIAGNOSIS AFTER ACUTE PANCREATITIS

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Case Description: We report a clinical case of a 30-year-old man with a personal history of type 1 diabetes mellitus who came to the emergency department for epigastric abdominal pain. Blood tests showed amylase 1485 U/l (N.V. 40-140) and calcium 12.7 mg/dl (N.V. 8.5-10.2). In addition, physical examination revealed an enlarged left testicle.

Clinical Hypothesis: We proposed as differential diagnosis, due to the presence of abdominal pain and hyperamylasaemia, the diagnosis of acute pancreatitis, being the biliary origin the most probable one. However, given the characteristics of our patient, our differential diagnosis included pancreatitis secondary to tumour hypercalcemia.

Diagnostic Pathways: To guide the proposed diagnosis, We requested a whole body CT scan compatible with acute pancreatitis, no lithiasis found. In addition, the patient had a 6-centimeter solid left testicular mass with disseminated lytic bone lesions. Testicular tumour markers (alpha-fetoprotein and human chorionic gonadotropin) were negative. Left testicular orchiectomy was performed. The pathological anatomy showed morphological and immunohistochemical findings compatible with embryonal rhabdomyosarcoma.

Discussion and Learning Points: Rhabdomyosarcoma is a malignant soft tissue tumour that usually presents at an early age (childhood and adolescence). The embryonal subtype is mostly located in the head and neck and in the genitourinary tract. According to several studies, the prognosis of patients worsens with age at diagnosis. This has been attributed to multiple causes, including the lack of standardized therapies in adults. In recent years, this age group has begun to be included more often in clinical trials, achieving better results in terms of survival.

Keywords: *rhabdomyosarcoma, tumoral hypercalcemia, acute pancreatitis*

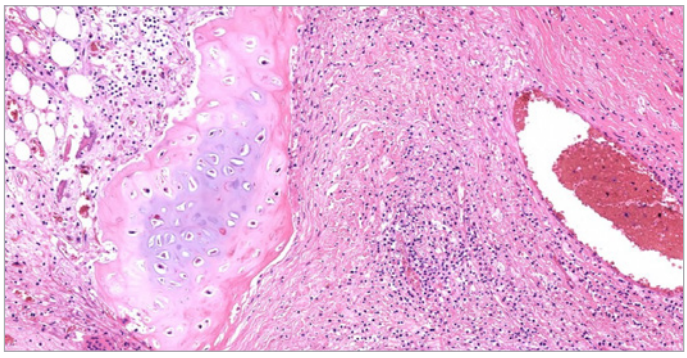

Figure 1. *Rhabdomyosarcoma H&E 20x.*
Area of necrosis with focus of chondroid differentiation (occasionally present in Embryonal Rhabdomyosarcoma).

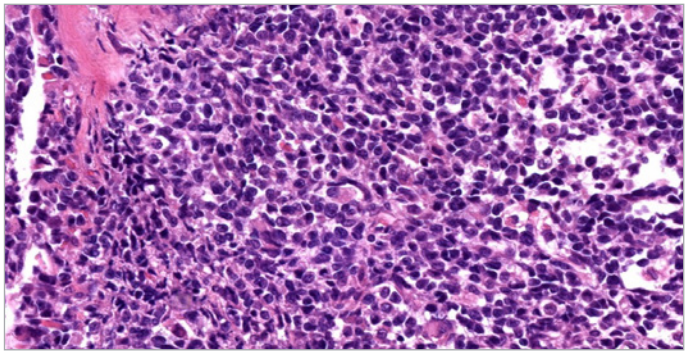

Figure 2. *Rhabdomyosarcoma H&E 40x.*
High-grade undifferentiated lesion with an infiltrative nature, composed of abundant cellularity with a round-fusiform morphology and scattered cells with a rhabdoid morphology, which showed immunoreactivity for skeletal muscle markers (not shown in the image).

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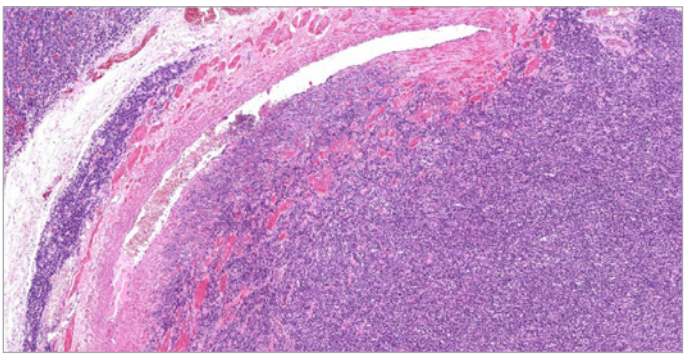

Figure 3. *Rhabdomyosarcoma H&E 4x.*
High-grade undifferentiated lesion with an infiltrative nature, composed of abundant cellularity with a round-fusiform morphology and scattered cells with a rhabdoid morphology, which showed immunoreactivity for skeletal muscle markers (not shown in the image).

[Abstract:1725]

PRIMARY MESENTERIC LIPOSARCOMA: AN UNCOMMON CASE OF ABDOMINAL MASS

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Case Description: A 51-year-old woman consulted for progressive abdominal distension and pyrosis after seven months of evolution, with episodes of epigastric abdominal accompanied by alternating diarrhoea and constipation. Physical examination revealed an increase in abdominal perimeter, a palpable mass of large volume and hard consistency in the epigastrium and mesogastrium, and diffuse abdominal pain.

Clinical Hypothesis: The first clinical hypothesis was neoplasia, although it was necessary to extend the study with further diagnostic tests.

Diagnostic Pathways: An imaging test was performed using contrast-enhanced computed tomography, which revealed findings compatible with mesenteric liposarcoma measuring 15 x 27.1 x 24 cm. A biopsy confirmed the diagnosis of well-differentiated liposarcoma. It was determined that surgery would not completely remove the tumour due to the risk of compromising the celiac trunk and mesenteric venous vessels.

Given the fragility of the patient, and the poor response to systemic treatment that this histology presents, the patient was not recommended for chemotherapy and palliative treatment was agreed.

Discussion and Learning Points: Well-differentiated mesenteric liposarcoma is a rare tumour characterised by aggressive local behaviour without metastatic capacity. It usually manifests an insidious clinical presentation that can complicate early diagnosis. Imaging tests are crucial for the diagnosis and planning of surgery, but only histology provides the definitive diagnosis. Complete tumour resection with negative margins offers the best long-term survival results, with less evidence concerning the use of adjuvant therapies.

Keywords: *liposarcoma, well-differentiated, mesentery*

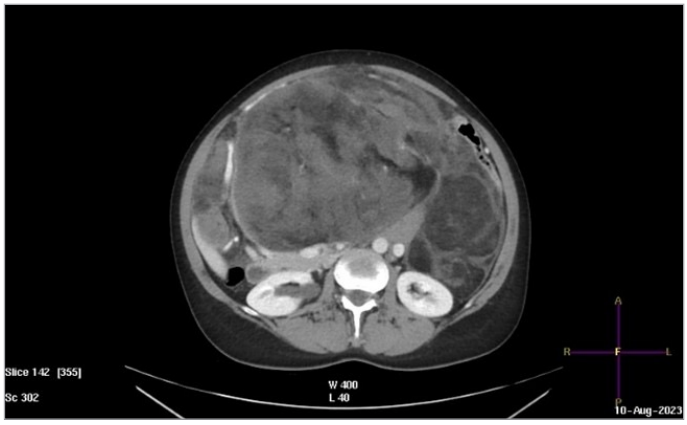

Figure 1.

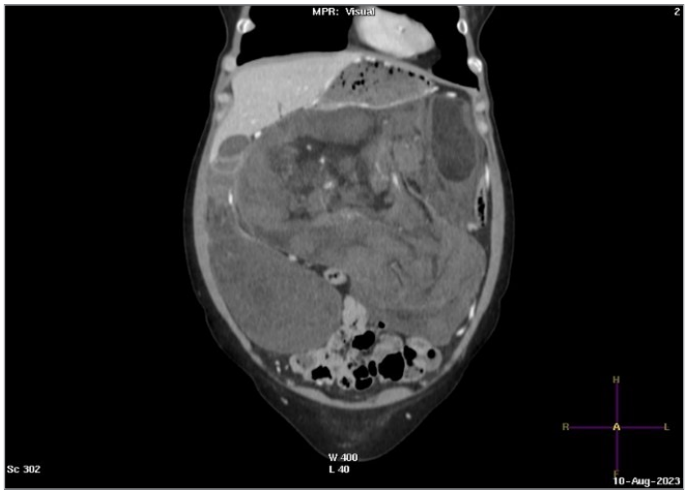

Figure 2.

[Abstract:1747]

DIAGNOSTIC CHALLENGE: CANCER OR SARCOID REACTION

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A 73-year-old woman presented with constitutional syndrome, epigastric pain and postprandial vomiting. Personal history of stage II sarcoidosis. Physical examination was normal, hemodynamically stable and afebrile, with pain in the right hypochondrium and epigastrium. Laboratory tests showed an altered liver profile (total bilirubin 2.37 mg/dl at the expense of direct bilirubin, GOT 91/ GGT 686 IU/dl, alkaline phosphatase 829 mg/dl), leukocytosis with neutrophilia and thrombocytes. Tumour markers CEA 67, CA 125 807, CA 19.9 926 and serologies negative. Abdominal ultrasound showed heterogeneous, expansive, solid and nodular

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lesions in the liver, later confirmed by abdominal CT scan, and a heterogeneous mass with a possible gastric or pancreatic connection was also observed. A liver biopsy was performed with an anatomopathological study showing an epithelial proliferation with a malignant appearance with positive immunohistochemical study for CK7, CK19 and CEA. The result is compatible with an origin in the pancreaticobiliary tract.

Sarcoidosis is a multisystem granulomatous disorder of unknown aetiology that affects patients aged 20-60 years. Pulmonary involvement is most common, with pancreatic involvement occurring in less than 1% of cases. There is a clear association between sarcoidosis and cancer, with a benign sarcoid reaction being described that returns after cancer eradication. It is a diagnostic challenge for staging to distinguish between sarcoid reaction or neoplastic invasion. Some cases of sarcoidosis associated with acute and chronic pancreatitis have been described in the literature, but association with pancreatic neoplasia is very rare, with only a few isolated cases reported.

Keywords: *cancer, sarcoidosis, sarcoid reaction*

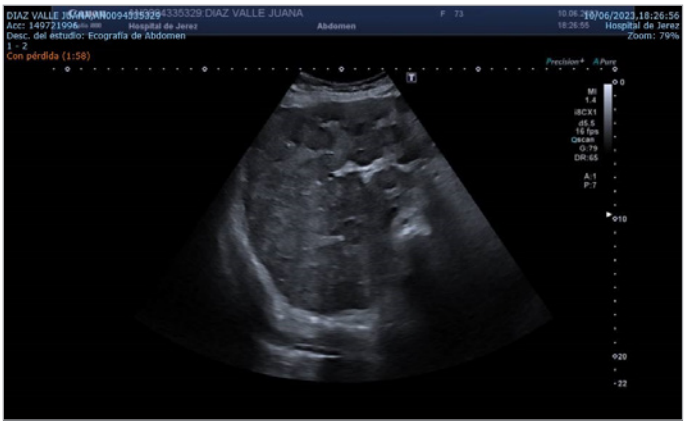

Figure 1. *Liver ultrasound.*

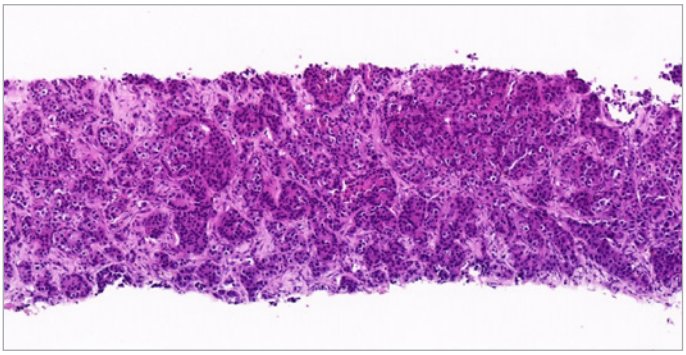

Figure 2. *Pathological anatomy.*
Both tissue cores show similar changes. About one third of each corer shows hepatic tissue with well preserved general architecture, and with sparce infiltration of small lymphocytes in portal spaces and slight cholestasis and macrovesicular steatosis in hepatocytes, that also show large nucleoli, but no relevant cytological atypia. The rest of the tissue core shows an epithelial proliferation with malignant appearance, with ill delimited margins with the hepatic tissue, consisting of solid nests, separated by thin connective tissue bands. This tumour nests are composed of medium-sized cells with eosinophilic cytoplasms and nuclei with moderate anisokaryosis, prominent nucleoli, and frequent empty intranuclear inclusions. In some areas the tumour cells are organized in ill- defined glandular or ductal structures, with cells showing a lighter eosinophilic cytoplasm with the same depicted nuclear appearance.

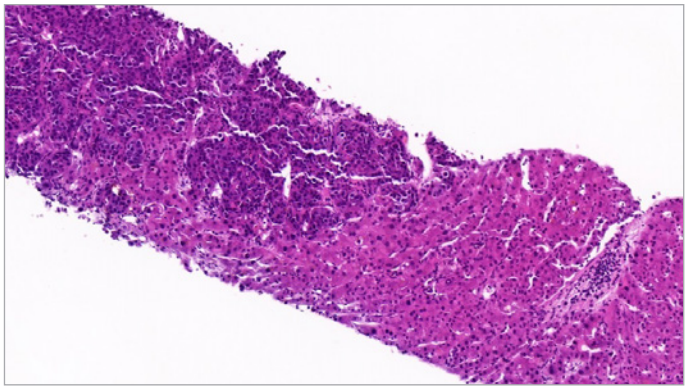

Figure 3. *Pathological anatomy.*

[Abstract:1769]

SCLERODERMIFORM CASE AND PULMONARY CARCINOMA: AN ATYPICAL NON-PARANEOPLASTIC CASE

Jie-Wei Oscar Li-Zhu[1], *Jorge Sanchez Redondo*[2], *Sonia Hernandez Puche*[2], *Carlos Martinez Caballero*[2], *Andrea Perez Rodriguez*[1], *Christiam Aram Tsourokdissian Alcala*[1], *Ane Busto Fernandez*[1], *Maria Isabel Curto Garcia*[3]

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64-year-old smoker woman was diagnosed of poorly differentiated lung adenocarcinoma (EGFR/ALK/ROS negative, PDL1 85%) and metastatic cervical adenopathy. PET/CT scanner showed also axillary involvement and chemo-radiotherapy was ruled out. Pembrolizumab was started on July 2021 with radiological response.

In October 2022, she reported weakness and myalgia. She was assessed by Neurology without myositis (electromyography without myopathy). Subsequently, she started with oedema in the extremities, arthralgias and asthenia accompanied by mild eosinophilia. Empirical steroids were started. MRI without evidence of fasciitis. No cardiac involvement. Rheumatology ruled out rheumatic origin. After steroids, subacute proximal weakness. A new electromyography was performed and showed myopathic pattern attributed to steroid myopathy. Steroids were withdrawn and immunoglobulins were administered without improvement.

In April 2023 she refers a progressive skin stiffening in the neck and extremities which limits swallowing and walking. Examination

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revealed diffuse sclerosis suggesting scleroderma symptoms (mRodnanSS 32). Skin biopsy was taken and it was compatible with scleroderma. Analytically AntiNuclear Antibodies and ENA-test were negative, without eosinophilia and negative creatin-kinase, ESR 77 (0-20) and CRP 20 (0-5). Capillaroscopy was normal. Echocardiography without pulmonary hypertension. Chest CT-scan showed known ground glass opacity. UGE without findings. Respiratory function tests reported a obstructive pattern.

The case was discussed with the Autoimmune Diseases Unit with the suspicion of pembrolizumab-immune-mediated symptoms to start immunosuppression, due to their greater experience with these therapies. Finally, methylprednisolone 125 mg (3 pulses) and later prednisone 20 mg/24h were decided, in addition to hydroxychloroquine and mycophenolate mofetil; as well as rehabilitation. Outpatient follow-up with progressive improvement.

Keywords: *scleroderma, pulmonary carcinoma, pembrolizumab*

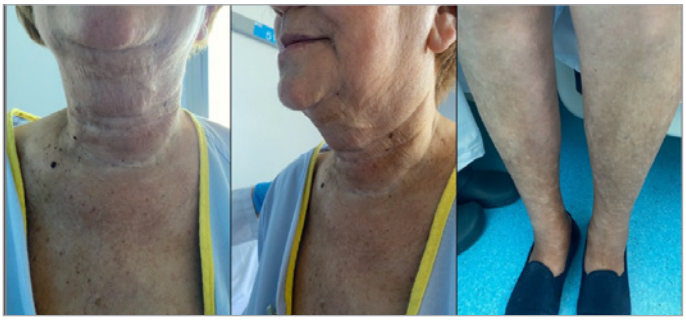

Figure 1. *Sclerodermiform lesions at diagnosis.*

[Abstract:1822]

PERITONITIS LYMPHOMATOSIS: A VERY RARE CASE

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[2] Department of Family Medicine, Okmeydani Training and Research Hospital, Istanbul, Turkey

Case Description: 39-year-man applied to our emergency clinic with complaints of oedema in the lower legs, weight loss, weakness for three months, along with abdominal swelling in two weeks. No history of family history was reported. BP: 110/80 mmHg, pulse: 128/min, and temperature: 36.5°C. Physical examination revealed significant abdominal distension, bilateral pretibial 3+nonpitting oedema. Hgb: 11.5g/l (13.2-17.3), sedimentation: 9 mm/hour (2-20), CRP: 52.08 mg/L (0-5), LDH: 1397 U/L (135-225), AST: 61 U/L (0-40), ALT: 44 U/L (0-41), total protein: 50 g/L (normal: 66-83), albumin 27.7 g/L (normal: 35-52). Hepatitis and HIV serology were negative.

Contrast-enhanced abdominal tomography showed numerous epigastric mass lesions-the largest of which was 5 cm, para-aortocaval, peripancreatic multiple LAP's, intra-abdominal massive ascites.

Clinical Hypothesis: Presumptive diagnosis of the patient was gastric carcinoma with peritonitis carcinomatosis.

Diagnostic Pathways: Ascites cell count: 9297/mm^3 leukocytes; 89% lymphocytes, 15% neutrophils, abundant erythrocytes. There was no growth in peritoneal culture. 18-FDG PET–CT reported the patient has peritonitis carcinomatosis upon detection of linear thickenings on the peritoneal serosal surfaces with increased FDG uptake in the form of a mass, prominent in the omentum minus region of the stomach (SUV max: 20.91), and multiple LAP's in the thorax and outside the mediastinum (SUVmax: 17.14) (Figure 1). Gastroesophagoscopy showed an ulcerated antrum mass, occupying the lumen of stomach (Figure 2). Biopsy taken from the lesion was compatible with diffuse large B-cell lymphoma. The patient is under follow-up with R-CHOP chemotherapy.

Discussion and Learning Points: Peritoneal lymphomatosis (PL) is a very rare clinical condition of malignant lymphomas, characterized by widespread peritoneal and mesenteric lesions, often accompanied by ascites. It has been described in the literature with sporadic case reports of aggressive B-cell lymphoma, especially diffuse large B cell lymphoma or Burkitt lymphoma. The radiologist and clinician must diagnose PL quickly, it is possible to achieve long-term remission and lifesaving treatment with chemotherapy. However, it should never be forgotten that death may occur if treatment is delayed.

Keywords: *peritoneal lymphomatosis, B cell lymphoma, ascites*

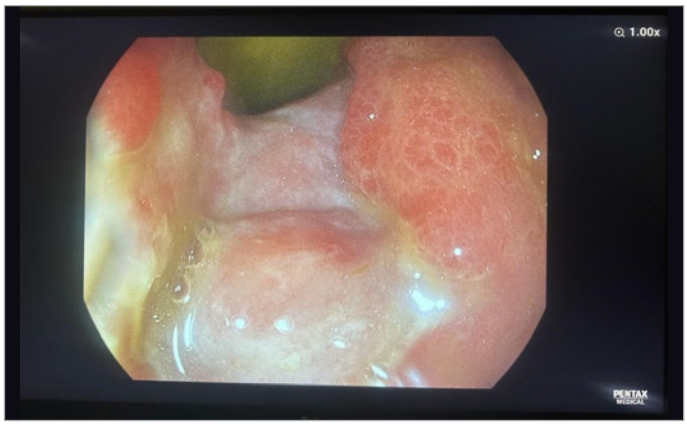

Figure 1. *Biopsy material was taken from the ulcerated lesion from the proximal part of the antrum of the stomach, covers 1/2 of the lumen in a half-moon shape, extends proximally, and continues to the proximal corpus involving the incisura angularis.*

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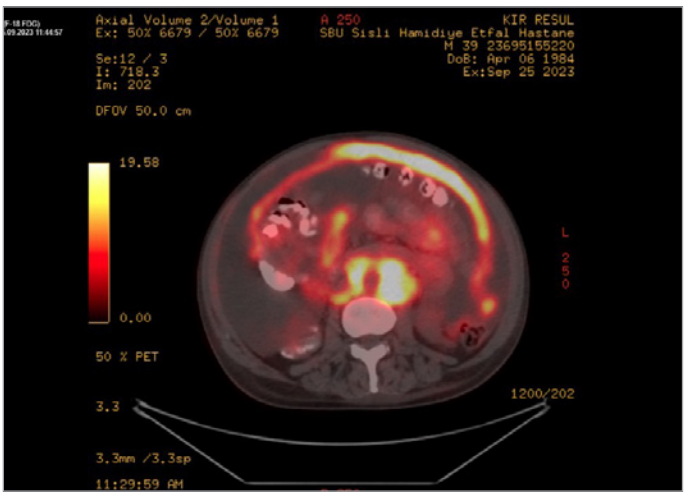

Figure 2. Image of involvement on peritoneal surfaces on F-18 FDG PET/CT.

[Abstract:1844]

THE IMPACT OF CONTROLLING NUTRITIONAL STATUS (CONUT) SCORING ON PROGNOSIS IN PATIENTS DIAGNOSED WITH MULTIPLE MYELOMA AND ITS COMPARISON WITH OTHER PROGNOSTIC SCORING SYSTEMS

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Aim: Multiple myeloma (MM) is a significant cause of haematological mortality and morbidity, predominantly occurring in older adults. Studies have demonstrated the importance of nutritional status in improving the treatment complications related to MM. In our study, we aimed to contribute to the literature by evaluating the CONUT (CONtrolling NUTritional Status) score of patients diagnosed with MM at various stages.

Materials and Methods: Our study was designed as a single-centre, retrospective cross-sectional study. Patients followed with a diagnosis of multiple myeloma (MM) were included. The data of the included patients were obtained from electronic health records and our hospital database. The obtained data were statistically analysed using appropriate statistical software.

Results: Death risk factors were identified as statistically significant factors for age ≥65, PNI <42, and CONUT score being mild, moderate, or severe compared to normal. For patients with normal and mild CONUT scores, a significant correlation was found with elevated WBC, RBC, Hb, platelet, neutrophil count, eosinophil count, basophil count, low globulin value, high serum calcium value, and high PNI value.

Conclusions: In our study, a significant correlation was found between low CONUT score and high PNI score. Our study has demonstrated that the CONUT score is an independent prognostic factor in patients with multiple myeloma, similar to findings in the literature. Furthermore, patients with lower CONUT scores were observed to have a lower ISS stage (stage-1) and longer overall survival (OS). Severity of CONUT scores tended to have higher rates ISS stage-2 and ISS stage-3, indicating an increased risk of mortality.

Keywords: *multiple myeloma, ISS, CONUT, PNI, prognosis, nutrition*

[Abstract:1855]

WHAT A WHITE VERTEBRA HIDES

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We present a 57-year-old woman who consulted due to weight loss, asthenia, dyspnoea, lower limbs oedema and unidentified skin lesion of 1 year's evolution. Anodyne blood analysis. Radiographs showed a sclerotic D4 vertebra, expanding the study with MRI with a sclerotic focus in the D4 body without local aggressiveness. Abdominal CT: Hepatosplenomegaly and multiple disseminated polyadenopathies. Echocardiography and catheterization compatible with moderate pulmonary hypertension (PHT). She presented oedemas progression, ascites, muscle weakness, generalized areflexia (confirming generalized diffuse sensory-motor demyelinating polyneuropathy by neurophysiology) and new sclerotic femoral lesion. Mild bilateral papilledema. We obtained monoclonal component of IgA lambda by serum immunofixation with normal VEGF. Bone marrow aspirate showed 0.3% of monoclonal plasma cells with malignant immunological characteristics. The femoral lesion biopsy evidenced hypercellular bone marrow due to an atypical plasma cell population >80% (CD 138+) (lambda over kappa).

The patient presented: Demyelinating polyradiculopathy, splenomegaly, monoclonal lambda component, sclerotic bone lesions, papilledema, PHT, bone marrow with atypical plasma cells, initial dermal lesion. She was diagnosed with POEMs syndrome, starting treatment with lenalidomide and dexamethasone. Autologous hematopoietic stem cell transplant was performed in 2021, without posterior relapses.

POEMS Syndrome is a rare paraneoplastic syndrome due to an underlying plasma cell disorder, of unknown cause. Bardwick (1980) establishes the acronym polyradiculoneuropathy, organomegaly, endocrinopathy, monoclonal protein, skin. He specifies two mandatory diagnostic criteria (poly-radiculopathy, monoclonal protein), a major criterion and a minor criterion (Table 1). Treatment consists of radiotherapy, systemic therapy (alkylating chemotherapy agents, thalidomine/lenalidomine, corticosteroids, bortezomid, bevacizumab) and even autologous hematopoietic stem cell transplantation.

Keywords: *sclerotic vertebra, POEMs syndrome, paraneoplasic*

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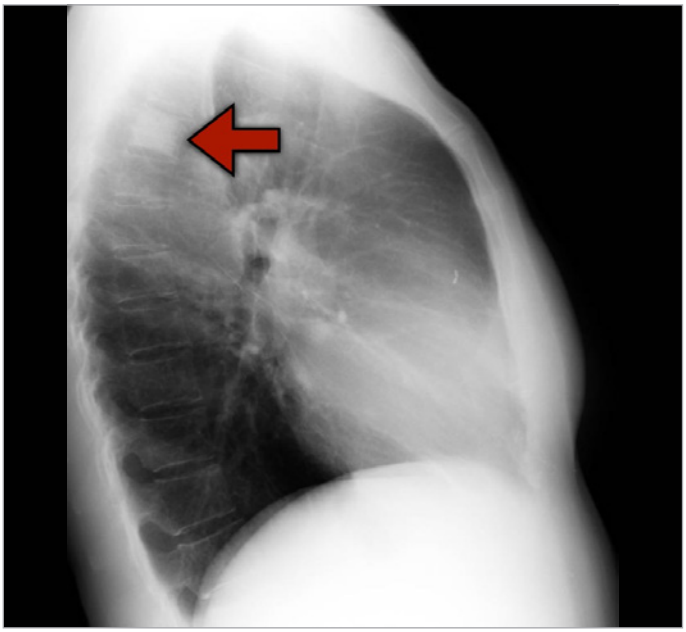

Figure 1. Sclerotic D4 vertebra.

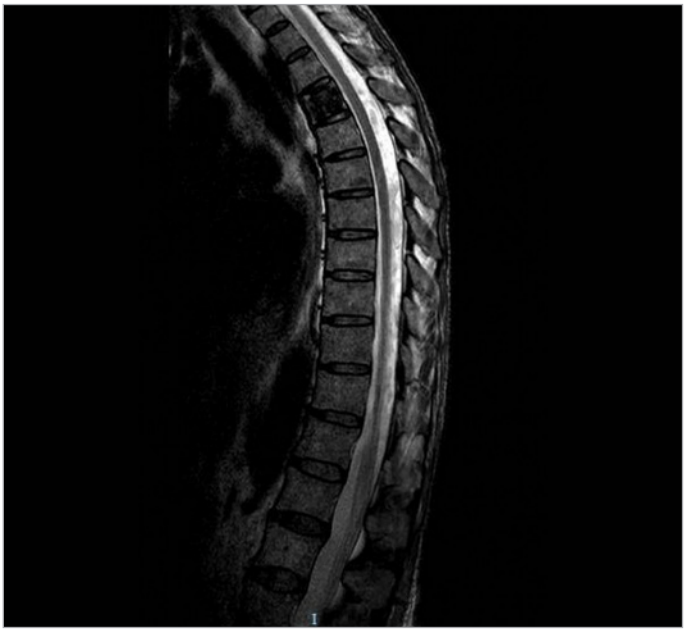

Figure 2. Vertebral lesion on MRI.

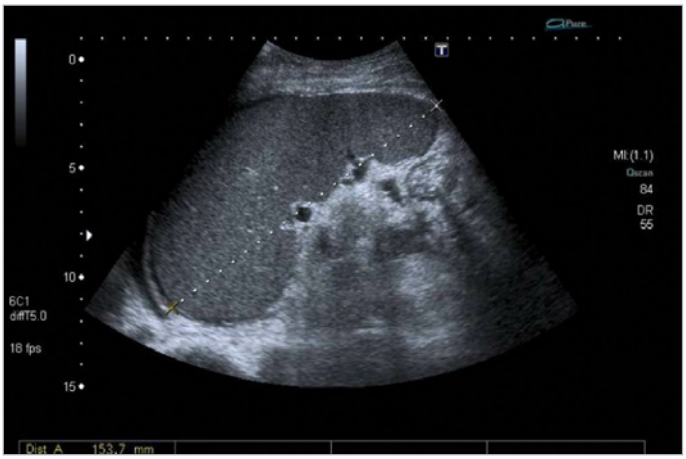

Figure 3. Hepatomegaly by ultra sound.

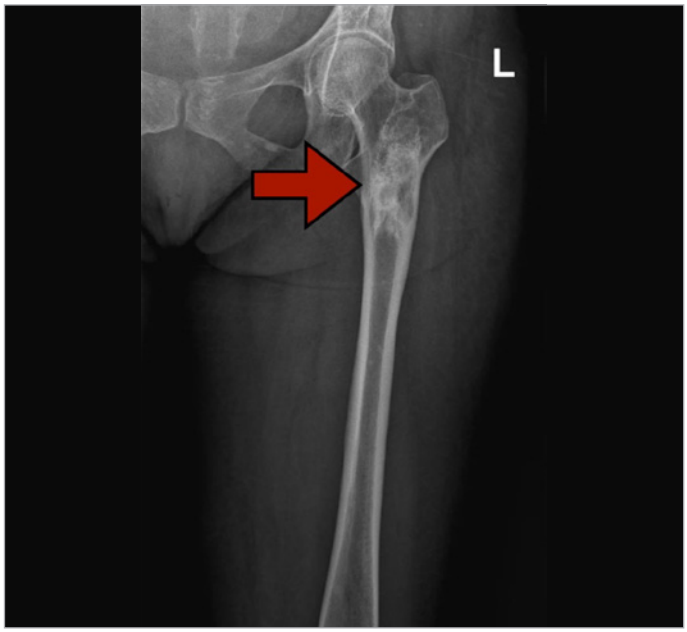

Figure 4. Femur lesion.

Mandatory Criteria (2 mandatories)	1. Polyneuropathy (typically demyelinating) 2. Monoclonal (mostly gamma) cell proliferative disorder
Major Criteria (1 needed)	3. Castelman Disease. 4. Sclerotic bone lesions 5. Elevation of vascular endothelial growth factor (VEGF)
Minor Criteria (1 needed)	6. Organomegaly (splenomegaly, hepatomegaly, lymphadenopathy) 7. Extravascular volume overload (edema, pleural effusion, ascites) 8. Endocrinopathy (adrenal, thyroid, pituitary, gonadal, parathyroid, pancreatic...) 9. Dermatological changes (hyperpigmentation, hypertrichosis, glomeruli hemangioma, acrocyanosis, blushing, white nails...) 10. Papilledema 11. Thrombocytosis/polycythemia
Other Symptoms	Weight loss, hyperhidrosis, pulmonary hypertension, restrictive lung disease, diarrhea, B12 deficiency...

Table 1. POEMS Syndrome diagnostic criteria.

[Abstract:1862]

METASTASES-INDUCED ACUTE PANCREATITIS: AN UNCOMMON MANIFESTATION OF INTIMAL SARCOMA OF THE PULMONARY ARTERY

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[2] Hospital Universitario de Torrejón, Medical Oncology Department, Torrejón de Ardoz, Spain

A 51-year-old man with a medical history of smoking (pack-year index 75) and prior Pulmonary Thromboembolism (PTE). Under investigation for a right parahilar mass discovered during the etiological study of PTE. Admitted to the Internal Medicine Department for constitutional syndrome and dyspnoea. During the admission the patient exhibited anorexia and acute intense epigastralgia, unresponsive to analgesia. Physical examination revealed superficial abdominal pain in epigastrium.

Considering the medical history and abdominal pain characteristics, differential diagnosis includes acute pancreatitis and biliary tract pathology.

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Laboratory tests showed elevated amylase (252 uI/l), lipase (759 uI/l), and high-sensitivity C-reactive protein (28.82 mg/dl).
A CT scan revealed pulmonary solid lesions, mediastinal infiltration, tumoural thrombosis of the right main pulmonary artery and ipsilateral upper lobar vein, massive right pleural effusion and pancreatic lesions suggestive of metastasis. ^{18}F-FDG PET/CT confirmed uptake in these lesions. A core needle biopsy on the middle lobe confirmed intimal sarcoma metastasis.
Pulmonary artery intimal sarcoma (PAIS) is an extremely rare, aggressive neoplasm with a poor prognosis, potentially misdiagnosed due to its presentation similar to pulmonary thromboembolism. It cannot be ruled out that in this case given the previous PTE diagnosis was a misdiagnosis of PAIS. Regarding the acute pancreatitis in this context, malignant neoplasms, particularly microcytic lung carcinoma, rarely cause it. It is attributed to mechanical obstruction of the pancreatic duct by tumour infiltration and/or compression, leading to secondary pancreatic enzyme activation. In this case, the treatment with chemotherapy resolved epigastralgia and normalized lipase levels.

Keywords: *acute pancreatitis, intimal sarcoma of the pulmonary artery, metastases*

[Abstract:1892]

A CASE OF METASTATIC PANCREATIC CANCER WITH A REMISSION PERIOD LONGER THAN EXPECTED UNDER GEMCITABINE MONOTHERAPY

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[1] Department of Internal Medicine, Hacettepe University School of Medicine, Ankara, Turkey
[2] Department of Internal Medicine, Division of Oncology, Hacettepe University School of Medicine, Ankara, Turkey

Purpose: A 74-year-old man, admitted with a 9-month history of decreased appetite, disseminated pruritus, was diagnosed with metastatic pancreatic cancer that could get suboptimal therapy due to various reasons. In this case we wanted to present a patient who was followed in remission for longer than expected under Gemcitabine monotherapy due to some socioeconomical factors that complicated the reach to combination therapies.
Methods: Different biochemical analyses to imaging techniques were used to detect the recurrence and progression during follow-up.
Findings: Besides his symptoms, he had elevated ALP, GGT, bilirubin levels as well as CT-proved mass on the pancreatic head. Gemcitabine-Nab-paclitaxel was the remissive treatment. However, for maintenance therapy, Gemcitabine was the only procurable drug. In contrast to reported cases in the literature, our patient had a much better overall and progression-free survival with two-to-three-fold of the expected period.
Conclusions: Pancreatic malignancies are one of the leading causes of mortality in cancer. While combined regimens are usually the best choice, in some patients monotherapies may provide long survival as well. This case aims to remind clinicians the possible long survival of pancreatic malignancy patients even under suboptimal treatments and the importance of proper follow up of cancer patients in detecting recurrences.

Keywords: *pancreatic adenocancer, gemcitabine, survival*

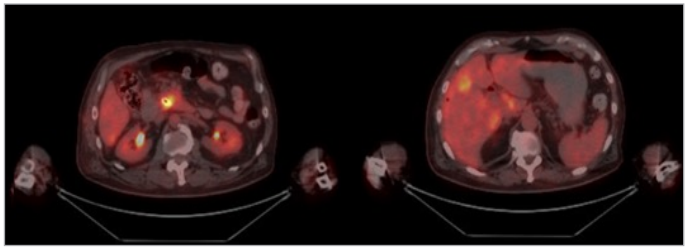

Figure 1. *PET-CT - Pathological FDG uptake of pancreatic head and metastases at diagnosis.*

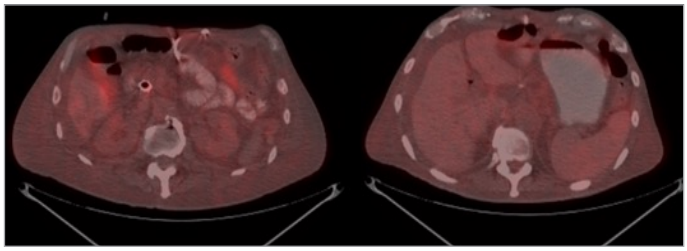

Figure 2. *Control PET-CT - The prominent remission of the disease after 8 cycles of Gemcitabine-Nab-Paclitaxel.*

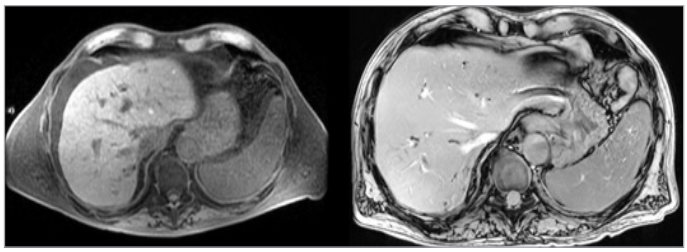

Figure 3. *Control MRI - 0-7th months of Gemcitabine-alone follow-up without recurrence.*

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[Abstract:1894]

LONG-TERM EFFICACY AND DISCONTINUATION PATTERNS OF THROMBOPOIETIN RECEPTOR AGONISTS IN CHRONIC IMMUNE THROMBOCYTOPENIA. A SINGLE-CENTER STUDY

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First Department of Internal Medicine, Laikon General Hospital, National and Kapodistrian University of Athens, Athens, Greece

Purpose: TPO-RAs (thrombopoietin receptor agonists) have been incorporated in the management of persistent or chronic ITP (immune thrombocytopenia), as second-line treatment, and have shown promising efficacy. Prolonged responses after TPO-RA discontinuation have also been reported. We report real-world outcomes of patients with ITP treated with TPO-RAs.

Methods: This retrospective study was conducted at the First Department of Internal Medicine of Laikon General Hospital in Athens, Greece. Data were obtained from adult patients with chronic/refractory primary ITP treated with TPO-RAs from January 2009 to September 2023.

Findings: A total of 45 patients were included. The median age was 51 years and 73% were female. Patients had been previously treated with corticosteroids (100%), intravenous immunoglobulin (51%), immunosuppressants (47%), rituximab (7%) or splenectomy (20%). The median duration of TPO-RA treatment was 48 months and 65% of patients achieved remission. Treatment discontinuation was noted in 25 patients (56%), due to either remission (88%) or poor response (12%). The median time to remission was 24 months. Six patients (13%), who did not initially respond, switched to another TPO-RA and four (67%) achieved remission. A total of 14 patients (31%) yielded durable responses and are still on treatment, with 71% of them achieving a dose reduction.

Conclusions: TPO-RAs display notable efficacy in ITP patients who are refractory to conventional treatments. Furthermore, sustained responses can be achieved, thus leading to drug discontinuation and quality of life improvement. Finally, switch to another TPO-RA may be reasonable for patients who do not initially respond.

Keywords: *thrombopoietin receptor agonists, immune thrombocytopenia, thrombopoietin receptor agonists discontinuation*

[Abstract:1908]

COUGH AND PALPITATIONS IN A YOUNG WOMAN. SHOULD WE THINK BEYOND A SIMPLE VIRAL RESPIRATORY INFECTION?

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Department of Internal Medicine, Hospital General Universitario Gregorio Marañón, Universidad Complutense de Madrid, Madrid, Spain

A 28-year-old women was admitted to the Emergency Department presenting with a dry cough, low-grade fever, progressive dyspnoea and palpitations. She had been prescribed treatment with a wide spectrum antibiotic, salbutamol and antihistamine medication in the previous month but her symptoms persisted. Although her basic blood test did not show any abnormal results, her chest X-ray revealed a voluminous mass in the mediastinum. She was admitted to the Internal Medicine Department.

In the physical exam we noticed the presence of collateral venous distention in her chest and difficulty breathing when laying down on her back below 30º. We performed haematologic test and a CT chest. Results showed the presence of a bulky B-cell non-Hodgkin lymphoma in the superior mediastinum. She was started on steroids and chemotherapy scheme and was transferred to the Haematology Department.

Bulky B-cell lymphoma is a distinct type of non-Hodgkin lymphoma with specific clinicopathological features. It presents typically in young adults in their third to fourth decade of life and has a slight female predominance. Clinically is characterized by symptoms of local compression by a rapidly growing mass in the anterior mediastinum including superior vena cava syndrome, cough, dyspnoea, hoarseness, and dysphagia. B symptoms (fever, weight loss, night sweats) may also be present.

We should bear in mind the existence of this particular lymphoma in young adults with chest or atypical respiratory symptoms to allow an early diagnosis and to avoid further complications.

Keywords: *Bulky-B- lymphoma, mediastinum, dyspnoea*

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[Abstract:1910]

A RARE CASE OF KAPOSI'S SARCOMA CONCURRENT WITH CHRONIC LYMPHOCYTIC LEUKAEMIA IN A PATIENT RECEIVING IBRUTINIB

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Kaposi's sarcoma (KS) is a vascular neoplasm of the endothelial cells of blood and lymphatic vessels, associated with human herpesvirus 8 (HHV-8). KS usually presents as red to purplish macules, papules and nodules anywhere on the skin or mucous membranes. Chronic lymphocytic leukaemia (CLL) is the commonest leukaemia mainly affecting older adults. The hallmark of the disease is clonal proliferation of malignant and functionally incompetent B lymphocytes. Non-specific skin signs such as cellulitis or petechiae and purpura, occur in up to 25% of patients. In addition, increased risk for skin cancer, and less commonly KS, has been reported in CLL. We report a case of Kaposi's sarcoma concurrent with CLL in a patient without HIV. A 72-year-old female patient who had a one-year history of CLL. The patient was started on ibrutinib 420mg/day and received ibrutinib for one year with a partial response with lymphocytosis. The patient was later admitted with multiple purplish, papulo-nodular lesions on the skin of the forearm, the dorsum of the hand and the leg below the knee. Following the excisional biopsy of papules and microscopic examination, the diagnosis of KS was made. We were not able to determine if this secondary malignancy was related to CLL itself or if it was related to ibrutinib treatment. We aim for this case report to raise alertness for KS and other secondary malignancies of the skin, in patients with CLL and in patients receiving ibrutinib.

Keywords: *chronic lymphocytic leukaemia, ibrutinib, Kaposi's sarcoma, human herpes virus-8*

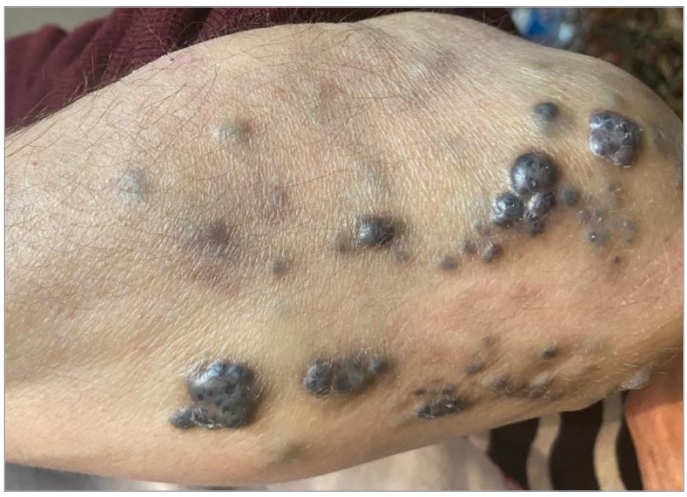

Figure 1. *Kaposi's sarcoma lesions on the patient's forearm.*

[Abstract:1917]

RETROSPECTIVE EVALUATION OF UPPER GASTROINTESTINAL SYSTEM COMPLICATIONS IN PATIENTS WITH PHILADELPHIA CHROMOSOME NEGATIVE CHRONIC MYELOPROLIFERATIVE NEOPLASIA TREATED WITH LOW-DOSE ACETYLSALICYLIC ACID

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[1] Health Sciences University, Bagcilar Education and Research Hospital, Department of Internal Medicine, Istanbul, Turkey
[2] Health Sciences University, Istanbul Education and Research Hospital, Department of Internal Medicine, Division of Hematology, Istanbul, Turkey

Summary and Purpose: It was aimed to investigate the frequency of dyspepsia and upper gastrointestinal (GI) system bleeding in cases of polycythemia vera (PV), essential thrombocythaemia (ET), primary myelofibrosis (PMF), which is a subgroup of Philadelphia (Ph) chromosome negative chronic myeloproliferative neoplasia, and the frequency and nature of gastroduodenal pathologies seen in cases that underwent upper GI endoscopy.

Methods: Adult 305 patients aged >18 years old who were diagnosed with Ph- chronic myeloproliferative neoplasm based on the 2016 World Health Organization criteria, who were followed up at the Health Sciences University Istanbul Training and Research Hospital between 2012 and 2022, were included. Demographic characteristics of the patients, laboratory parameters, history of dyspeptic complaints and upper GI tract bleeding, upper GI tract endoscopy findings in patients were compiled by using the hospital's database and patient files.

Findings: Of the 305 patients, 132 had PV, 138 had ET and 35 patients had PMF. There were 67 patients with dyspepsia and 16 patients with upper GI bleeding. Of the 71 patients who underwent upper GI endoscopy, 53 had gastritis, 15 had peptic ulcer, and 3 had oesophageal varices.

Conclusions: Low-dose acetylsalicylic acid use did not significantly

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increase gastroduodenal pathologies in the entire cohort, while the frequency of dyspepsia was significantly higher in the ET patient group. Esophageal varices were significantly higher in the PMF group. We think that multicentre, prospective randomized controlled studies will contribute more to the literature on the subject.

Keywords: *acetylsalicylic acid, upper gastrointestinal system bleeding, chronic myeloproliferative neoplasia*

Diagnosis (ET)	ASA Use - n (%)	ASA Use + n (%)	p value
Dyspepsia -	19 (100%)	89 (74.8%)	0.01
Dyspepsia +	0 (0%)	30 (25.2%)	0.01
Upper GI System Bleeding -	19 (100%)	11 (94.1%)	0.59
Upper GI System Bleeding +	0 (0%)	7 (5.9%)	0.59

Table 1. *Distribution of ASA Use and the Presence of Upper GI System Bleeding and Dyspepsia in ET Patients.*
Significance level was taken as p<0.05.

Diagnosis	PV	ET	PMF	
	n (%)	n (%)	n (%)	p value
Dyspepsia -	102 (77.3)	108 (78.3)	28 (80)	0.94
Dyspepsia +	30 (22.7)	30 (21.7)	7 (20)	0.94
Upper GI System Bleeding -	125 (94.7)	131 (94.9)	33 (94.3)	0.99
Upper GI System Bleeding +	7 (5.3)	7 (5.1)	2 (5.7)	0.99

Table 2. *Distribution of Dyspepsia and Upper GI System Bleeding in Diagnostic Groups.*
Significance level was taken as p<0.05.

Diagnosis	PV	ET	PMF	
	n (%)	n (%)	n (%)	p value
Gastritis -	6 (18.8)	10 (31.3)	2 (28.5)	0.48
Gastritis +	26 (81.3)	22 (68.8)	5 (71.5)	0.48
Pangastritis	12 (37.5)	9 (28.1)	2 (28.6)	0.98
Antral gastritis	11 (34.3)	10 (31.3)	2 (28.6)	0.98
Erosive gastritis	3 (9.4)	3 (9.4)	1 (20)	0.98
Peptic ulcer -	26 (81.3)	24 (75)	6 (85.7)	0.77
Peptic ulcer +	6 (18.8)	8 (25)	1 (14.3)	0.77
Gastric ulcer	3 (9.4)	7 (21.9)	1 (14.3)	0.45
Duodenal ulcer	3 (9.4)	1 (3.1)	0 (0)	0.45
Esophageal varices -	31 (96.9)	32 (100)	5 (71.4)	0.003
Esophageal varices +	1 (3.1)	0 (0)	2 (28.6)	0.003

Table 3. *Distribution of Upper GIS Endoscopy Findings in Diagnostic Groups.*
Significance level was taken as p<0.05.

[Abstract:1954]

CHALLENGES IN THE DIAGNOSIS OF EXTRANODAL NON-HODGKIN'S LYMPHOMA: A RARE CASE REPORT

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[2] Department of Gastroenterology, State Budget Institution of Ryazan Region "Regional Clinical Hospital", Ryazan, Russia

Case Description: A 66-year-old woman was admitted with signs of liver failure, cytolysis, cholestasis, and hepatosplenomegaly. Viral, toxic, and autoimmune causes of liver damage were excluded. There was a history of thrombocytopenia for 4 years. On admission, jaundice, telangiectasias, and multiple bruises are present. Peripheral lymph nodes (LN) are not enlarged on palpation. Heart sounds are muffled, rhythm is regular.

Clinical Hypothesis: Patients with multiple visceral lesions in primary nodular non-Hodgkin's lymphoma (NHL) present the greatest diagnostic challenge. The gastrointestinal tract, bones, and nervous system are most commonly involved. Involvement of the heart is rare.

Diagnosis: Computed tomography shows lymphadenopathy of the intrathoracic LNs and exudative pericarditis. Echocardiography shows hypertrophy of the left ventricle (history of arterial hypertension), enlargement of the left atrium, 350 ml of fluid in the pericardial cavity, and a homogeneous echogenic mass of 2.4 x 2.6 mm in the right atrium.

The presence of thrombocytopenia, lymphadenopathy, and hepatosplenomegaly led to the suspicion of a lymphoproliferative disease. Despite treatment, the patient died. Pathological examination confirmed the presence of NHL with specific infiltration of LN and internal organs: liver (Fig. 1A), spleen, kidneys, adrenal glands, myocardium (Fig. 1B), and cardiac valve apparatus (Fig. 2).

Discussion and Learning Points: Features of this clinical case are the presence of multiple internal organ involvement in NHL with predominant liver damage and rare cardiac involvement including myocardial, and valvular lesions. The clinical polymorphism of NHL complicates timely diagnosis and consequently delays the start of specific therapy.

Keywords: *non-Hodgkin lymphoma, visceral presentations, hepatosplenomegaly*

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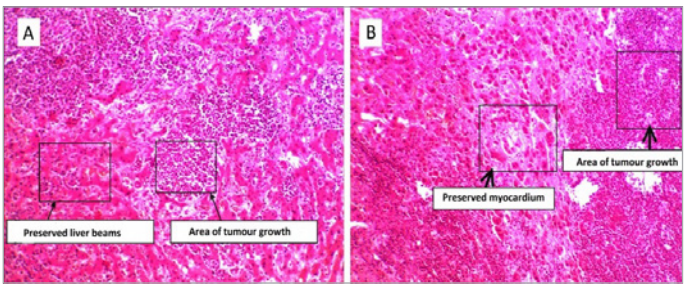

Figure 1. Tumour infiltration of the liver (A) and myocardium (B), micropreparation.

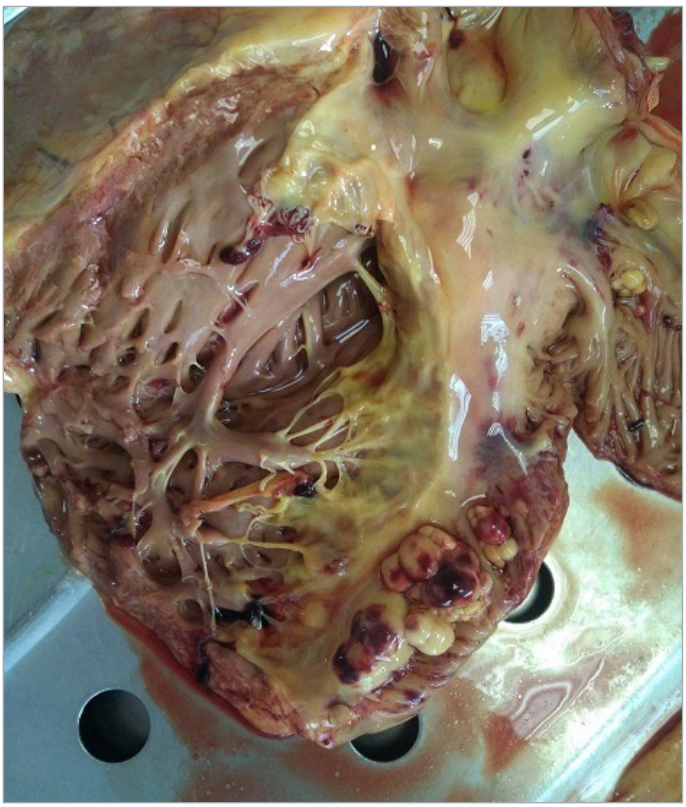

Figure 2. Tumour infiltration of tricuspid valve flaps.

[Abstract:1964]

DISTRIBUTION OF MONOCYTE SUBSETS IN FOLLICULAR LYMPHOMA AND THE IMPACT OF TREATMENT ON THEIR DISTRIBUTION

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Purpose: Distribution of monocyte subsets (MS) has been reported to influence tumour microenvironment in several malignancies. However data on the course of lymphoma is scarce. The aim of our research was to investigate the early impact of treatment on MS in follicular lymphoma (FL). We discuss the preliminary results of an ongoing trial in lymphoma patients' FL subgroup.

Methods: Peripheral blood samples, from patients with FL and healthy controls (HC), were analysed by flow cytometry both at the diagnosis and interim response evaluation prospectively. The cells in the monocyte region of CD45-SS graphic were gated based on CD14, CD16 and HLA-DR surface markers and classified as classical (CM), non-classical (NM) and intermediate (IM) monocytes.

Results: Table 1 shows patient characteristics, while Table 2 presents the analysis of MS distribution. FL patients have significantly higher number of CD14brightHLA-DRdim monocytes ($p<0.001$) and lower HLA-DRdimNM ($p=0.002$) compared to HC. Although an increase in the proportion of NM in patients with high FLIPI score, no significant difference was observed in MS evaluation between pre- and post-treatment assessments. Extranodal involvement is associated with an increase in HLA-DRbrightCM ($p=0.04$). Platelets were found to be correlated positively with monocytes ($r=0.013$) and CM ($r=0.016$) in high-risk patients.

Conclusions: Our findings indicate a significant deviation of the MS distribution in patients with newly diagnosed FL compared to HC. This small and relatively homogeneous cohort suggests that the distribution of MS has little impact on immune crosstalk in FL and treatment doesn't change it. Further studies with larger and heterogenous groups might help exploring the potential clinical implications.

Keywords: *monocytes, monocyte subsets, follicular lymphoma*

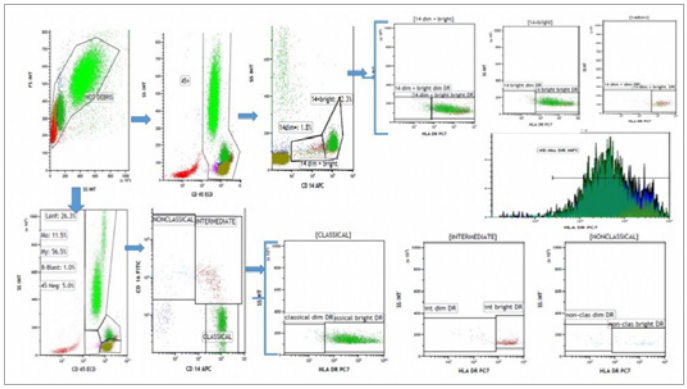

Figure 1. Flow cytometric analysis of monocyte subsets chart. The cells in the monocyte region of CD45-SS graphic were gated based on CD14, CD16 and HLA-DR surface markers and classified as classical (CD14++ CD16-), non-classical (CD14- CD16+) and intermediate (CD14+ CD16+) monocytes. Monocytes have been classified as "dim" and "bright" based on their HLA-DR expression.

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Characteristics		No. of patients: 9	No. of controls: 16
Gender (F/M)		Patients	78%/22% (n:7/2)
		Controls	75%/25% (n:12/4)
B symptoms		Present	56% (n: 5)
		Absent	44% (n: 4)
Ann Arbor Stage		I/II	0% (n: 0)
		III/IV	100% (n: 9)
Bone marrow involvement		Yes	78% (n: 7)
		No	22% (n: 2)
Extranodal disease		Yes	78% (n: 7)
		No	22% (n: 2)
FLIPI risk score		Low	0% (n: 0)
		Intermediate	22% (n: 2)
		High	78% (n: 7)
Treatment		Rituximab (R)	11% (n: 1)
		R – Benda	44% (n: 4)
		R - CHOP	44% (n: 4)
Interim treatment response		CR	56% (n: 5)
		PR	44% (n: 4)
Laboratory findings	**Healthy Controls**	**Patients at Diagnosis**	**Patients at Interim**
White Blood Cells – cells/µL	6800 [4738 – 8862]	8200 [3293 – 13107]	4600 [1986 – 7214]
Lymphocytes – cells/µL	2050 [1522 – 2578]	2100 [-113 – 4313]	800 [555 – 1045]
Monocytes – cells/µL	550 [339 – 761]	700 [364 – 1036]	600 [417 – 783]
Hemoglobin – g/dL	13,60 [12,6 – 14,6]	12,20 [10,91 – 13,49]	11,70 [10,61 – 12,79]
Platelets – cells/µL	262,500 [215,826 – 309,174]	297,000 [131,677 – 462,322]	251,000 [165,016 – 336,983]
Beta-2 microglobulin – mg/L	NT	3710 [1007 – 6413]	2330* [1360 – 3300]
LDH - U/L	NT	279 [174 – 384]	257 [189 – 325]

Table 1. *Characteristics of patients and healthy control group.*
**Only 2 patients were tested for Beta-2 microglobulin NT: not tested.*

Flow Cytometric Cell Counts	Healthy controls	Patients at Diagnosis	Patients at Interim	*p*-value*	*p*-value**
Age	54 [37 – 71]	64 [38 – 78]		0,112	
$CD14^{dim}$ / mm^3	73 [48 – 97]	62 [25 – 99]	100 [38 – 162]	0,734	0,953
$CD14^{dim}$ $HLA\text{-}DR^{dim}$/ mm^3	3 [-1 – 7]	5 [3 – 7]	3 [-9 – 16]	0,821	NT
$CD14^{dim}$ $HLA\text{-}DR^{bright}$/ mm^3	65 [42 – 88]	56 [21 – 92]	87 [15 – 158]	0,734	NT
$CD14^{bright}$ / mm^3	638 [329 – 946]	623 [31 – 1216]	555 [314 – 796]	1,000	0,441
$CD14^{bright}$ $HLA\text{-}DR^{dim}$/ mm^3	7 [-5 – 19]	681 [-7742 – 9105]	5 [-106 – 115]	**<0,001**	NT
$CD14^{bright}$ $HLA\text{-}DR^{bright}$/ mm^3	626 [326 – 926]	619 [87 – 1150]	551 [252 – 850]	0,955	NT
Classical monocytes - $CD14^+$ $CD16^-$	490 [254 – 727]	517 [86 – 948]	423 [277 – 587]	0,777	0,260
$CD14^+$ $CD16^-$ $HLA\text{-}DR^{dim}$/ mm^3	5 [-9 – 16]	12 [-42 – 65]	2 [-95 – 100]	0,193	0,767
$CD14^+$ $CD16^-$ $HLA\text{-}DR^{bright}$/ mm^3	485 [256 – 713]	502 [101 – 903]	389 [193 – 585]	0,777	0,214
Intermediate monocytes - $CD14^+$ $CD16^+$	51 [28 – 73]	33 [4 – 63]	74 [23 – 125]	0,089	0,086
$CD14^+$ $CD16^+$ $HLA\text{-}DR^{dim}$/ mm^3	2 [0 – 3]	4 [1 – 6]	1 [-8 – 9]	0,294	0,173
$CD14^+$ $CD16^+$ $HLA\text{-}DR^{bright}$/ mm^3	48 [27 – 70]	30 [1 – 59]	74 [16 – 132]	0,062	0,173
Nonclassical monocytes - $CD14^-$ $CD16^+$	42 [5 – 79]	20 [-23 – 64]	78 [41 – 115]	0,308	0,110
$CD14^-$ $CD16^+$ $HLA\text{-}DR^{dim}$/ mm^3	27 [-2 – 55]	6 [-14 – 26]	7 [-9 – 23]	**0,002**	0,594
$CD14^-$ $CD16^+$ $HLA\text{-}DR^{bright}$/ mm^3	16 [4 – 27]	15 [-26 – 57]	68 [33 – 103]	1,000	0,214

Table 2. *Distribution of Monocyte Subsets.*
**comparison between healthy control group and patients at diagnosis*
***comparison of patients between diagnosis and interim treatment response evaluation NT: Not tested*

[Abstract:1983]

METASTATIC ENTERIC-TYPE PULMONARY ADENOCARCINOMA - A DIAGNOSTIC CHALLENGE

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Introduction: Lung neoplasms correspond to the main cause of death from oncological diseases in Portugal, with increasing incidence and prevalence.
Case Presentation: Woman, 65 years, no relevant pathological history, presented with irritative dry cough with 2 months of evolution, and a chest CT with evidence of a nodule in the right lower lobe (RLL) suggestive of pulmonary hamartoma and hilar and mediastinal lymph nodes. She was referred to an Internal Medicine consultation with palpable supraclavicular adenopathies and a core biopsy was performed compatible with metastasis of a solid neoplasm. A CT scan of the body showed supraclavicular, mediastinal and hilar lymphadenopathy of greater number and dimensions than the previous CT scan and a nodule in the RLL consistent with hamartoma, with no other changes to highlight. Anatomopathological study of supraclavicular adenopathy showed signet ring cells with expression of CK7 and GATA3. Breast study (mammogram and ultrasound) and endoscopic studies (with blind biopsies) were normal. PET scan with focus of intense uptake in the RLL suggestive of malignant lung neoplasm with lymph node, left adrenal and multifocal bone metastasis. Transthoracic aspiration biopsy was performed with anatomopathological study compatible with TTF1- and CDX2+ enteric type adenocarcinoma and was proposed for treatment with chemotherapy and immunotherapy. In the 2nd month of treatment a brain CT scan was requested with diffuse cerebral metastasis. The patient died 4 months after diagnosis.
Conclusions: Enteric-type pulmonary adenocarcinoma is a rare subtype of non-small cell lung cancer, which shares morphological and immunohistochemical features with lung and colorectal adenocarcinoma.

Keywords: *pulmonary adenocarcinoma, enteric-type adenocarcinoma, metastatic lung cancer*

[Abstract:1986]

PULMONARY ADENOCARCINOMA - AN ADVANCED STAGE DIAGNOSIS

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Introduction: Lung neoplasms correspond to the main cause of death from oncological diseases in Portugal, with an increasing incidence and prevalence.
Case Presentation: Man, 58 years old, with a history of smoking (29 pack-years), presented with constitutional syndrome with 12 Kg weight loss in 3 months associated with asthenia and anorexia. Reference to productive cough (without hemoptoic sputum), pleuritic chest pain, night sweats and frequent afternoon fever spikes with the same evolution time. He completed a cycle of antibiotics with amoxicillin/clavulanic acid without improvement. Reference to the subsequent appearance of stone-like skin nodularities in the posterior cervical and anterior thoracic regions. Upon admission, tracheobronchial secretions were collected with a negative *Mycobacterium tuberculosis* complex DNA test. Body CT was performed with evidence of a right hilar mass measuring 52 mm in largest diameter with invasion of the ipsilateral main bronchus, mediastinal and supraclavicullar lymph nodes and suspected diffuse hepatic, cutaneous and bone metastasis.

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Aspiration biopsy of subcutaneous nodules was performed with anatomopathological study revealing morphological profile compatible with adenocarcinoma of pulmonary origin PD-L1 1-5%, with G35T mutation in exon 2 of the KRAS gene and chemotherapy and immunotherapy were initiated, completing one cycle with subsequent clinical worsening and death.

Conclusions: Activating KRAS mutations are observed in approximately 20-25 percent of lung adenocarcinomas and are generally associated with smoking. Although chemotherapy agents are already available for tumours with KRAS mutation, for the ones with alterations other than G12C, there are no targeted therapy options, so only standard chemotherapy and/or immunotherapy is indicated.

Keywords: *pulmonary adenocarcinoma, metastatic pulmonary adenocarcinoma, pulmonary neoplasm*

[Abstract:2007]

"UNEXPECTED" ENCOUNTERS: UNCOMMON MANIFESTATIONS OF B-CELL CHRONIC LYMPHOCYTIC LEUKAEMIA PROMPTING THE DIAGNOSIS OF ADVANCED PROSTATE CANCER

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B-cell chronic lymphocytic leukaemia (B-CLL) is associated with an increased risk of developing secondary malignancies (SM), due to inherent immunodeficiency. Herein, we report a case of concurrent B-CLL and stage IV prostate cancer.

A 78-year-old male presented with prominent lymphocytosis ($81x10^9$/L), normocytic anaemia (haemoglobin 8.5 g/dL), thrombocytopenia ($66x10^9$/L), and DIC (disseminated intravascular coagulation) along with significantly elevated levels of ALP (alkaline phosphatase, 11.234 U/L) and LDH (lactate dehydrogenase, 1800 U/L), without lymphadenopathy. An increased number of small, mature-appearing lymphocytes and smudge cells and leucoerythroblastic reaction were noted in a blood smear. Flow cytometry confirmed the diagnosis of B-CLL; however, leucoerythroblastic reaction, DIC, and high levels of ALP and LDH are uncommon findings in CLL. Upon investigation, strikingly high PSA (prostate-specific antigen) levels (3.429 ng/mL) were found (being reported normal seven months earlier). Histologic evaluation of the BM (bone marrow) revealed infiltration by poorly differentiated prostate cancer cells and the presence of extensive necrosis. Infiltration by CLL cells, which is always present, was absent. Bone scintigraphy revealed a superscan appearance, confirming the presence of extensive bone metastasis. The patient was started on GnRH analogues and denosumab, achieving a significant reduction of PSA and ALP levels along with disappearance of DIC, whereas no treatment initiation for CLL was required since anaemia and thrombocytopenia were attributable to prostate cancer.

Collectively, uncommon CLL findings should prompt the diagnosis of SM. Additionally, CLL patients should be closely monitored for SMs, since an increased incidence of SM has been reported by several studies in those patients.

Keywords: *chronic lymphocytic leukaemia, prostate cancer, secondary malignancies*

[Abstract:2012]

BASELINE CHARACTERISTICS OF ONCOLOGY PATIENTS ADMITTED TO INTERNAL MEDICINE IN AN ACUTE CARE UNIT AND IN A PALLIATIVE CARE UNIT

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The aim of this study was an analysis of baseline characteristics and monitoring of patients with active oncological disease in the internal medicine department of an acute hospital and a palliative care unit. The research aimed to determine mortality rates and relevant factors within this intricate population.

A retrospective study conducted in October 2021 consisted of patients with active oncological disease within the Internal Medicine department. Patients were classified into either acute or palliative care units and followed up for a month following discharge or until death. Statistical analyses, including $\chi 2$ for qualitative variables and Student's T-test for quantitative variables, were conducted.

Out of 62 patients, which represented about 13% of admissions, 54.8% were male, with a median age of 71 years (range: 56-77). Colorectal cancer was the most prevalent, followed by lung and breast cancer. Common complications included pain (60%) and infections (52%). Significantly, the median age of acute care patients was younger compared to the palliative care unit (68 years (55-77) vs. 76 years (69-79), p=0.015). Acute care patients also demonstrated a more favourable baseline status (p<0.001). Mortality was 42%, with higher mortality observed in the palliative care unit (84%) compared to acute care (23%) (p<0.001).

Therefore, patients with active oncological disease accounted for a significant proportion of internal medicine admissions. Palliative care admissions were found to correlate with older age, poorer baseline status, and higher inpatient mortality rates. Effective patient profiling assists in decision-making processes.

Keywords: *oncological disease, palliative care, mortality*

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[Abstract:2025]

A RARE CASE REPORT WALDENSTROMS MACROGLOBULINEMIA

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Waldenstrom's macroglobulinemia (WM) is a lymphoproliferative disease characterized by infiltration of the bone marrow with lymphoplasmocytic cells and the presence of IgM monoclonal gammopathy. A 57-year-old female patient applies to the internal medicine clinic with a complaint of fatigue that has been going on for 3 months. There is no known history of chronic disease. He does not use any medication regularly. The patient received intermittent blood transfusion. In the examinations, pancytopenia is detected. PET-CT imaging revealed hypermetabolic LAPs in the mediastinum, widespread sclerotic appearance in the skeletal system, and slightly hypermetabolic hypodense lesions to the right of the superior L1 vertebral body.

Bone marrow biopsy was performed on the patient with the preliminary diagnosis of Ig M macroglobinemia and WM. Bone marrow biopsy was evaluated as compatible with WM due to the presence of monoclonal paraproteinemia compatible with "Lymphoplasmacytic Lymphoma".

The patient was started on R-Benda (Rituximab-Bendamustine) chemotherapy in the haematology clinic. WM is diagnosed by the presence of an IgM monoclonal paraprotein on serum immunofixation and ≥10 percent infiltration on bone marrow biopsy.

Keywords: *Waldenstrom's macroglobulinemia, pancytopenia, anaemia*

[Abstract:2028]

A COHORT OF PATIENTS WITH ACQUIRED HEMOPHILIA IN A THIRD LEVEL HOSPITAL DURING 28 MONTHS

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Objectives: Describe the clinical characteristics, complementary findings and therapeutic attitudes, of patients admitted with acquired haemophilia.

Materials and Methods: Retrospective descriptive study of patients admitted to Hospital Clínico San Carlos de Madrid with the diagnosis of haemophilia A acquired between January 2017 and May 2019. There have been collected demographic, clinical, analytical and mortality data.

Results: There are 5 patients with this diagnosis, 3 women and 2 men with an average age81.8 years old. 40% had a history of neoplasia acquired. 100% (5) were diagnosed after the appearance of spontaneous hematomas and APTT prolongation, 40% (2) retroperitoneal hematomas, digestive bleeding and hemarthros 20% (1). The confirmation was made after mixture test and determination of Factor VIII with an average value of 6.4%. 100% started eradication treatment with corticosteroids and cyclophosphamide, using in a single case rituximab. 100% (5) required transfusions in addition to using by-pass agents in 80% (4) of the cases. 100% (5) of the sample corresponds to idiopathic aetiology with a mortality of 40%.

Discussion: We found a higher average age is found than that recorded in other analyses, probably given the high age of the patients treated at our centre. A 100% of idiopathic cases despite exhaustive study with (immunology, PET-CT), unlike others in which there is a 50%, no difference in terms of mortality.

Conclusions: Acquired haemophilia is a rare disease with high morbidity and mortality. It should be suspected APTT lengthening, abnormal acute haemorrhagic symptoms, without personal history or relatives of coagulopathy without excluding anticoagulants and antiaggregants. The treatment eradicator should be started from diagnosis.

Keywords: *acquired haemophilia, mortality, corticosteroids, factor VIII*

[Abstract:2029]

IMPORTANCE OF ANAMNESIS AS A DIAGNOSTIC GUIDE IN AN ADRENAL MASS

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Case Presentation: A 76-year-old male with type 2 diabetes as the only personal history presented to the Emergency Department with a 4-day history of dyspnoea associated with atypical chest pain. A routine blood test revealed acute microcytic-hypochromic anaemia (Hb: 7.8 g/dL), and an elevated D-dimer that prompted an evaluation for pulmonary embolism, ruled out by a CT angiography that showed a left adrenal mass associated with retroperitoneal lymphadenopathy.

Hypothesis: Adrenal mass under investigation.

Diagnostic Pathways: In the medical history, weight loss due to hyporexia, food aversion, and postprandial heaviness were noted. An abdominal computed tomography (CT) raised suspicion of adrenal carcinoma. Hormonal analysis ruled out urinary catecholamines, and a negative I-123-metayodobenzylguanidine scan was obtained. Finally, a FDG PET-CT reported suspicion of gastric neoplasia, later confirmed by endoscopic biopsy as infiltrative high-grade gastric adenocarcinoma, with the adrenal mass confirmed by biopsy as a metastasis.

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Discussion and Learning Points: The discovery of an adrenal incidentaloma is a common reason for consultation, found in up to 4.4% of abdominal scans. Radiological features such as size or lesion attenuation contribute to identifying its origin, with particular attention to rule out carcinomas or metastases. Our case emphasizes the importance of the patient's medical history, which initially pointed to a digestive tumour as the primary possibility if we had taken into account the clinical and analyses features rather than radiological data that misled to a different diagnosis pathway.

Keywords: *adrenal mass, medical history, gastric adenocarcinoma*

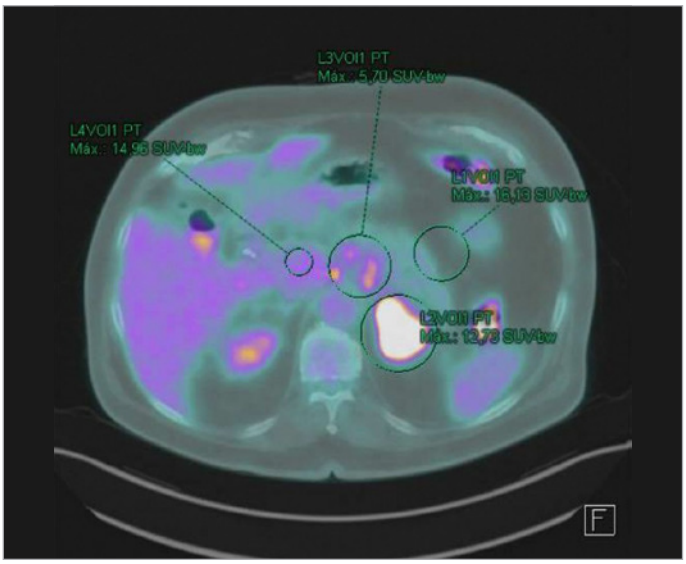

Figure 1. *Adrenal mass and adenopathies.*

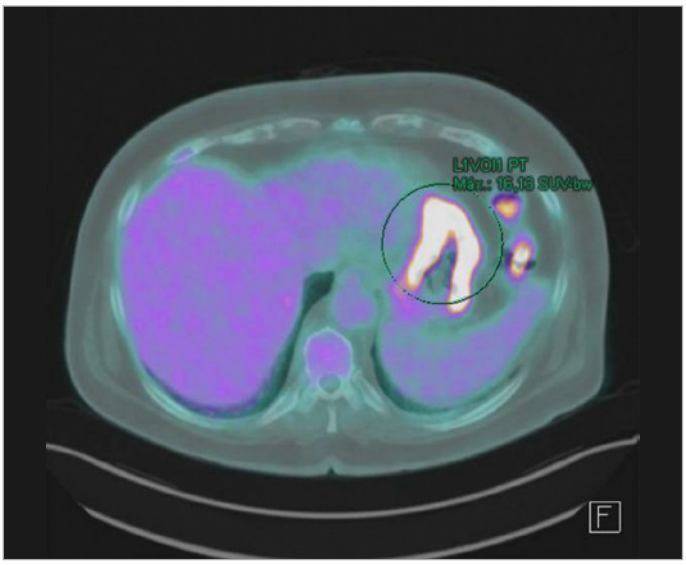

Figure 2. *Gastric cancer.*

[Abstract:2058]

EYES WIDE OPEN: COLLABORATIVE APPROACH TO EARLY DETECTION OF PRIMARY VITREORETINAL LYMPHOMA

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Background: Primary vitreoretinal lymphoma is a rare presentation of lymphoma and its clinical manifestations can be initially diagnosed as vitreitis, uveitis, vasculitis, optic disc oedema, retinal ischemia or haemorrhage, retinal detachment, and secondary glaucoma. On fundoscopy, it is classically observed the presence of yellow-white infiltrates in the subretinal epithelium, which increases in size with the disease progression. Blurred vision, vision loss and floaters are common eye complaints. Due to its low prevalence, similar signs and symptoms to other eye diseases coupled with difficulties in obtaining ocular specimens, PVRL is often lately diagnosed increasing the risk of extraocular involvement and worsening clinical outcome.

Case Presentation: A 57-year-old man presented with visual disturbance and eye floaters. Initial examination by an ophthalmologist raised suspicions about vitreal abnormalities, prompting a vitrectomy. Flow cytometry of the vitreous sample revealed atypical lymphocytes and vitreous pathology confirmed the diagnosis of non-Hodgkin lymphoma.

Conclusions: Although PVRL is rare, its clinical manifestations overlap with more common eye disorders, making early diagnosis challenging. This case underscores the necessity for close collaboration between ophthalmologists and haematologists to facilitate timely recognition and optimal management.

Keywords: *vitreal lymphoma, lymphoma, flow cytometry*

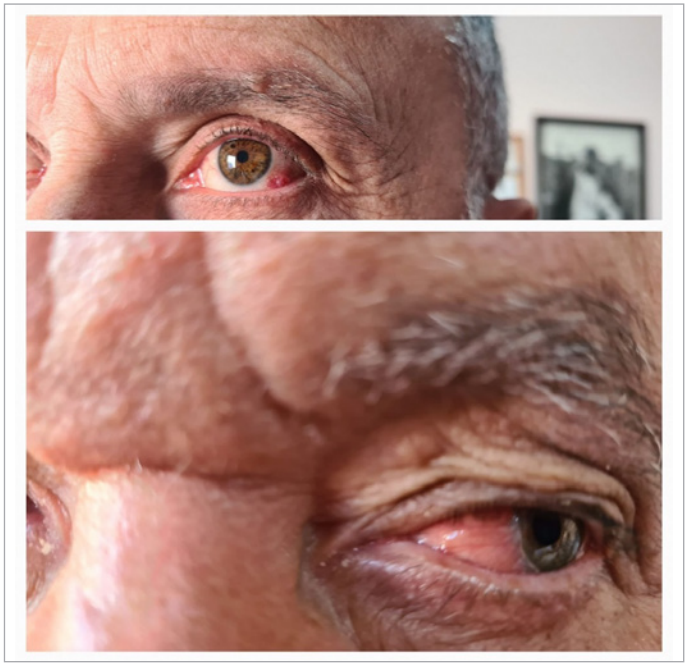

Figure 1. *Eye photo.*

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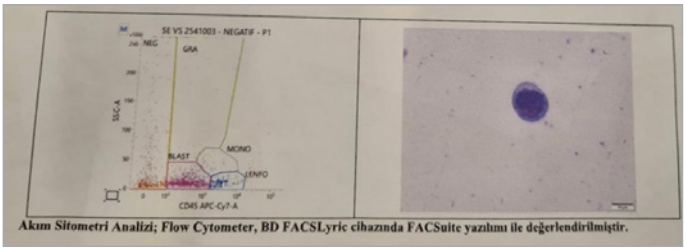

Figure 2. *Flow cytometry.*

[Abstract:2065]

DRUG-INDUCED ANAEMIA

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40-year-old man with schizophrenia and intellectual disability, treatment with clozapine was started three months ago. He was admitted because of asthenia and a low haemoglobin count found in a medical check-up. On examination, mucocutaneous pallor, no evidence of active bleeding. We considered the differential diagnosis of anaemia causes; as main options: nutritional deficiencies, hidden bleeding, malignancy and drugs. Given the temporal relationship, clozapine toxicity was one of the main diagnostic suspicions. A new blood test confirms a haemoglobin of 6.8 g/dL, progressively declining levels over the last three months. It was a normocytic, normochromic and non-regenerative anaemia. On the other hand, leukocytes 14100/µL (neutrophils 9990/µL), platelets 905000/µL, levels increasing over the last three months. No nutritional deficiencies were found. No abnormalities in blood smear. The CT scan showed no adenopathies or masses. Bone marrow study resulted normal. Given the absolute normality of all the tests, we decided to remove clozapine from his treatment. In the following months, a restoration of blood cells levels has been checked. Thus, the pharmacological aetiology of this anaemia is more than probable. Anaemia is considered a rare and poorly understood adverse effect of clozapine treatment, unlike others such as agranulocytosis. The pathogenesis of this is unknown. This case report calls not to forget to review the complete patient treatment when we face diagnostic challenges.

Keywords: *anaemia, clozapine, drugs*

[Abstract:2077]

PROSTATE ADENOCARCINOMA AS A CAUSE OF SECONDARY POLYCYTHEMIA

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Polycythemia is characterized by haemoglobin levels exceeding 16.5 g/dl in men (hct > 49%) and 16 g/dl in women (hct > 48%). The most prevalent factors leading to secondary polycythemia include obstructive sleep apnoea, obesity hypoventilation syndrome, chronic obstructive pulmonary disease (COPD) and heavy smoking. A 60-year-old male diagnosed with hypertension visited our internal medicine clinic complaining of weakness and fatigue. Test results revealed hgb: 10.5 g/dl and mcv: 104 fl. Peripheral blood smear analysis showed normochromic, slightly macrocytic cells, polychromasia, basophilic stippling, and hypersegmented neutrophils. His B12: 197 pg/ml, with antiparietal cell antibodies: 184 RU/ml (positive >20 RU/ml), and increased reticulocyte values. Simultaneously, endoscopy revealed atrophic gastritis. After starting B12 replacement therapy, subsequent checks indicated normalized hgb levels and alleviated symptoms. A year later during a follow-up, his hgb was 18.6 g/dl, hct was 55.9%, and other values were normal. He experienced occasional headaches, dizziness, and exhibited plethoric appearance during physical examination. Erythropoietin levels were normal, and no smoking or night-time snoring habits were reported. Cardiac and pulmonary examinations showed no abnormalities. Total PSA screening showed values of 24 ng/ml and free PSA of 1.52 ng/ml. Multiparametric prostate MRI classified as ACR PIRADS-4 led to a prostate biopsy, confirming prostate adenocarcinoma. Ga68-PSMA PET/CT showed no metastasis, and he underwent surgery. Postoperatively, the patient remained in remission with normal hgb and hct levels. Consequently, while tumours like hepatocellular carcinoma, renal cell carcinoma, and adrenal adenoma are more commonly associated with secondary polycythemia, our case indicates the possibility of secondary polycythemia stemming from prostate adenocarcinoma.

Keywords: *polycythemia, prostate adenocarcinoma, factors causing polycythemia*

[Abstract:2099]

PERITONEAL CARCINOMATOSIS: A RARE PRESENTATION OF BREAST CANCER

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Peritoneal carcinomatosis originates mostly from gastric, colorectal, and gynaecological malignancies, being ovarian cancer the most common presentation.

An 80-year-old female patient with history of hypertension, obesity and dyslipidaemia presented to the hospital with vomiting, indigestion and limb oedema for one week. She also reported recent use of corticosteroids and denies weight loss.

Due to iron deficiency anaemia, left pleural effusion and ascites with suspected peritoneal carcinomatosis in abdominal CT scan, the patient was admitted for additional study.

Peritoneal fluid cytology showed cells suggestive of carcinoma of unknown origin, with signet ring cells, diffuse positivity for cytokeratin 7 and very non-specific immunohistochemical profile. Upper gastrointestinal endoscopy revealed chronic gastropathy

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with no active bleeding and colonoscopy showed no signs of malignancy. Pelvic ultrasound showed a known uterine myoma, with stable dimensions, and no ovarian masses were found. Cervical cytology was also negative.

Due to findings on the physical exam, breast ultrasound and mammogram were performed, which led to the diagnosis through biopsies of the nodule on the left breast and homolateral axillary adenopathy. These cells expressions matched the ones obtained through paracentesis, confirming the diagnosis of secondary peritoneal carcinomatosis and invasive breast lobar carcinoma.

Cancer of unknown primary site is a relatively common clinical entity in internal medicinal wards and a detailed medical history and physical examination have a crucial role in finding the correct diagnosis.

Keywords: *peritoneal carcinomatosis, breast cancer, oncology*

[Abstract:2101]

DIVERSE MANIFESTATIONS OF LYNCH SYNDROME: A PILOCYTIC ASTROCYTOMA DIAGNOSIS

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Introduction: Lynch Syndrome (LS) is a dominant autosomal disease marked by an increased predisposition to colorectal carcinoma, accounting for 3% of diagnosed cases. It also correlates with a higher risk of several other malignancies.

Case Presentation: A 24-year-old male diagnosed with LS and carrying a pathogenic deletion in the MLH1 gene presents with a headache persisting for about 1 month (daily, frontal, pulsatile, ~10 seconds duration). He also reports nausea and vomiting, and denies nocturnal awakenings due to pain, visual changes or deficits in strength or sensation. A neurological examination reveals left-sided limb dysmetria, and a head CT showed a space-occupying lesion with a pseudo-cystic component, with perilesional oedema requiring further characterization.

Corticosteroid therapy was started due to the oedema and an MRI showed a "large intra-axial expansive lesion cantered on the cerebellar vermis, compressing and collapsing the fourth ventricle."

The rest of the neuraxis study showed no additional lesions. The patient underwent satisfactory microsurgical removal of the left paramedian intra-axial cerebellar tumour. Pathological anatomy reveals a grade I pilocytic astrocytoma of the posterior fossa. Immediate post-op period showed worsening of initial neurological deficits — left limb dysmetria with gait limitation and dysarthria. The patient was referred for outpatient physiotherapy.

Conclusions: LS is mainly linked to increased risk of colorectal and endometrial cancers. While cerebral tumours are uncommon, glioblastomas are the most frequently reported, followed by astrocytomas. Limited reporting and the overall rarity of these brain tumours emphasize the importance of regular monitoring for early detection in individuals with LS.

Keywords: *lynch syndrome, pilocytic astrocitoma, cancer*

[Abstract:2110]

A CASE OF ADULT DISSEMINATED HEMANGIOMATOSIS TREATED WITH BEVACIZUMAB AND ZOLEDRONAT

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Introduction: Disseminated hemangiomatosis (DH) is a rare condition and is mostly diagnosed in childhood. Here, a case of DH diagnosed in adult age with involvement of visceral organs and bones is presented.

Case Presentation: In a 43-year-old female patient without any known chronic disease, extensive, similar, expansile and mostly sclerotic bone lesions were detected in the imaging performed for low back and knee pain for 4 years. In addition, CT showed lesions in the lung parenchyma.

Although bone lesions were primarily evaluated in favour of fibrous dysplasia with polyostotic involvement, PET-CT imaging performed to investigate malignancy showed that the mentioned lesions didn't retain FDG. In the pathological examination made from the lesion in the right lung, vascular lesions accompanied by capillary-cavernous and venous vascular structures in a multifocal focus within the lung parenchyma were seen, and angiomatosis was considered in the foreground. Simultaneously, similar formations were found in the biopsy material taken from the iliac bone.

When the radiological and histological findings were evaluated together, it was thought that the patient had DH with bone and visceral organ involvement. For the patient's treatment, propronalol and zolendronate was started. Interferon was added after the progression. With no response, IFN was discontinued and bevacizumab was started then the pain started to decrease and no progression was detected. The patient whose zolendronate treatment was discontinued in the follow-ups is still taking bevacizumab/propranolol and is being followed up without complications.

Discussion and Conclusions: DH is rarely diagnosed in adult

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age and there aren't established views on its treatment. Clinical response was observed with the combination of bevacizumab/propronalol/zolendronate.

Keywords: *disseminated hemangiomatosis, bevacizumab, zolendronate*

[Abstract:2134]

CLINICAL, RADIOLOGIC AND HISTOLOPATHOLOGIC EVALUATION OF 84 SUPERIOR VENA CAVA SYNDROME (SVCS) PATIENTS

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Introduction: SVCS is a syndrome caused by obstruction of the superior vena cava. Because most common causes of SVCS are malignant, it is crucial to understand features of SVCS.

Objectives: Our objective was to determine the clinical, radiological, bronchoscopic and the histolopathogical characteristics of SVCS.

Materials and Methods: Eighty-four cases with SVCS were evaluated according to symptoms, radiologic, histopathologic and bronchoscopic findings.

Results: The most common symptoms in SVCS were facial and neck swelling (100%), cough (77.3%), dyspnoea (73.8%), clubbing (53.5%), chest pain (52.3%) and sputum (48.8%).

Chest X-ray showed that 68 patients (80.9%) had right lung lesions, 5 (5.9%) had left lung lesions and 10 (11.9%) had bilateral mediastinal widening. One patient (1.1%) had a normal X-ray.

Samples were obtained from all patients and 64 (76.1%) had a histopathologically confirmed diagnosis. Of the 64 patients, 28 (43.7%) were diagnosed with squamous cell lung cancer (SCC), 19 (29.6%) with small cell lung cancer, 7 (10.9%) with lung adenocarcinoma, 3 (4.6%) with metastatic lung cancer, 3 (4.6%) with Hodgkin's disease, 2 (3.1%) with non-Hodgkin lymphoma, 1 (1.5%) with carcinoid tumour and 1 (1.5%) with thyroid hyperplasia. Bronchoscopy revealed that 72 (85.7%) had bronchial oedema, 51 (60.7%) had endobronchial lesions and 7 (8.3%) had normal appearance.

Conclusions: We found that facial and neck swelling was the most common symptom. Patients with SVCS predominantly had lesions located in right lung. Most common cause of SVCS was lung cancer, SCC being the most common type. Mucosal oedema was the most common bronchoscopic appearance.

Keywords: *superior, vena, cava, syndrome, histologic, clinical*

[Abstract:2149]

VANISHING BILE DUCT SYNDROME AFTER THERAPY WITH NIVOLUMAB AND CABOZANTINIB IN A PATIENT WITH ADVANCED CLEAR CELL RENAL CARCINOMA

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Tyrosine kinase inhibitors (TKIs) and immune checkpoint inhibitors (ICIs) significantly improve the outcomes of patients with advanced clear cell renal carcinoma (aCCRC); however, high-grade toxicities can occur, particularly during combination therapy. Vanishing bile duct syndrome (VBDS) is a rare but serious complication of drug induced liver injury characterized clinically by chronic cholestasis and histologically by loss of intrahepatic bile ducts.

A 56-year-old man with de novo metastatic clear cell renal carcinoma was started cabozantinib and nivolumab. He was risk-staged with poor risk according to IMDC criteria. After 2 cycles of cabozantinib and nivolumab his bilirubin and liver enzymes started to increase. His medications included. Abdominal ultrasonography showed normal liver and pancreas, and not dilated intra or extrahepatic bile ducts. Serologic tests for viral hepatitis were all negative. Given the cholestatic pattern, magnetic resonance cholangiopancreatography (MRCP) was obtained and turned out to be unremarkable.

After the exclusion of common disorders associated with cholestasis and a failure of corticosteroids (CS), a liver biopsy was performed which showed cholestatic hepatitis with ductopenia, consistent with VBDS.

Keywords: *checkpoint inhibitors, cholestasis, vanishing bile duct syndrome*

[Abstract:2151]

A 74 YEARS OLD WOMAN WITH ASTHENIA

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Case Description: A 74-years-old women with any relevant medical history came to the emergency room for three months of evolution of progressive asthenia, low-grade fever, intermittent profuse night sweats and mild unquantified weight loss with marked hyporexia that has increased to limit her daily activities.

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She did not refer other symptoms and the physical examination was anodyne.

Clinical Hypothesis: Constitutional syndrome at study. Probable lymphoproliferative syndrome.

Diagnostic Pathways: A complete blood test with included calcium, proteinogram, and liver profile was done and it revealed an increase LDH, lymphopenia with leukopenia, plateletopenia and coagulation disorders. It was also done a complete image study with a body CT which revealed multiple adenopathies in almost all deep locations as well as a space-occupying lesion at the liver suggestive of a metastatic lesion.

A biopsy of bone marrow biopsy was requested which revealed an invasion by T-cell lymphoma, so in order to confirm the diagnosis it was also done a biopsy of one of the supraclavicular lymphadenopathy with allowed us reach the diagnosis of ALK-negative anaplastic T-cell lymphoma.

Discussion and Learning Points: Anaplastic T lymphoma is a rare and aggressive peripheral non-Hodgkin T cell lymphoma, belonging to the group of CD30 positive lymphoproliferative disorders. General symptoms include loss of appetite and tiredness, as well as fever, weight loss, and night sweats (B symptoms). The first-line treatment is chemotherapy based on the administration of anthracycline through CHOP regimens (cyclophosphamide, doxorubicin, vincristine and prednisone).

Keywords: *constitutional syndrome, adenopathy, lymphoproliferative syndrome, anaplastic T lymphoma*

[Abstract:2155]

DIFFUSE LARGE B-CELL LYMPHOMA – A RARE PRESENTATION

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Introduction: Diffuse large B-cell lymphoma (DLBCL) can, in approximately 40% of cases, manifest as extranodal disease, affecting various tissues.

Case Presentation: Female, 66 years old, with a history of neurofibromatosis type 1 involving the skin and hypertension. Presented to the emergency department with asthenia, diarrhoea, and abdominal pain evolving over 3 weeks. Hypotensive (BP 88/53 mmHg) with hyponatremia (125 mEq/L), hyperkalemia (6.4 mEq/L), and acute kidney injury (creatinine 2.80 mg/dL, urea 221 mg/dL). Adrenal insufficiency was early considered, and presumptive treatment initiated, resulting in clinical and analytical improvement. Abdominal computed tomography revealed a nodular lesion in the right adrenal and enlargement of the left adrenal, without adenopathy or organomegaly. Thyroid dysfunction was noted with reduced T4, T3, and TSH. Pituitary MRI showed an enlarged gland with a possible adenoma. Cortisol levels did not confirm adrenal insufficiency; hence, hydrocortisone was discontinued. Approximately 24 hours later, clinical deterioration with hypotension, respiratory failure, and oliguria. Given the association with neurofibromatosis, pheochromocytoma was ruled out. Unfavourable clinical course with refractory shock (undetermined aetiology). Autopsy revealed DLBCL involving the pituitary, skin, pericardium, peritoneum, lungs, heart, gastrointestinal tract, mesentery, fallopian tubes, kidneys, and right adrenal, with malignant lymphoid cell infiltration in small-calibre vessels. Liver and bone marrow showed signs of hemophagocytosis without apparent neoplastic involvement.

Conclusions: Intravascular large B-cell lymphoma represents a rare subtype, typically displaying aggressive behaviour due to vascular involvement, leading to occlusion of small to medium vessels and organ dysfunction.

Keywords: *intravascular large B-cell lymphoma, rare presentation, DLBCL*

[Abstract:2195]

IN SEARCH FOR A CAUSE: A CASE OF PTH-RP RELATED HYPERCALCEMIA IN NON-HODGKIN'S LYMPHOMA

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Hypercalcemia is a common phenomenon in malignancy and can occur by different mechanisms. Here we present the case of a patient who was admitted with new onset hypercalcemia mediated by elevated parathyroid hormone related peptide (PTH-rp).

We present the case of an 85-year-old woman admitted with a history of slow developing lethargy, confusion and increased physical dependence. Initial blood tests showed severe hypercalcemia (15.1 mg/dl corrected for albumin) and acute kidney injury (maximum creatinine 2.8 mg/dl).

In addition to the initial therapy of fluids and diuretics, the patient was started on bisphosphonates.

Additional testing revealed normal values of intrinsic parathyroid hormone (iPTH) and vitamin D insufficiency (17.1 ng/ml); alkaline phosphatase was normal and protein electrophoresis showed no abnormalities. Bone imaging excluded any lytic lesions. No pharmacologic iatrogenesis was evident.

With the increasing possibility of paraneoplastic hypercalcemia, the patient underwent a CT scan revealing signs of gastric neoplasm with major adenopathic involvement both local and mediastinal; later confirmed by endoscopy showing diffuse infiltrative neoplasm involving the entire gastric wall. Biopsy

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of the lesions confirmed the presence of diffuse large B-cell lymphoma. Dosing of the PTH-related peptide was requested and later revealed to be twice the normal limit (4.6 pmol/L).
The patient was started on prednisolone 1 mg/kg/day and started chemotherapy the next week.
Hypercalcemia is frequent as a paraneoplastic syndrome, and its presence, especially when refractory, should alert the clinician to the possibility of occult malignancy. PHT-rp is an important factor in its development, especially in hematologic malignancies.

Keywords: *hypercalcemia, PTHrp, lymphoma, non-Hodgkin's lymphoma*

[Abstract:2202]

AN UNUSUAL CASE OF GASTRIC CANCER PRESENTED WITH BICYTOPENIA

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Gastric cancer is one of the most common malignancies and is responsible for approximately 8% of cancer related deaths worldwide. Advanced disease is substantially presented with liver, peritoneum, and distant lymph node metastases. Bone marrow involvement in gastric adenocarcinoma is extremely rare. There are very few publications on this subject in the literature. Here, we report a case of 52-year-old female patient examined for severe lumbago and shortness of breath. Laboratory tests revealed leukocytosis, anaemia and thrombocytopenia. Bone marrow biopsy showed dissemination of adenocarcinoma. This case report emphasizes bone marrow metastasis represented by bicytopenia as the first sign of gastric cancer. In differential diagnosis of patients with cytopenia, solid organ malignancies that can infiltrate the bone marrow should be kept in mind as well as haematological diseases.

Keywords: *gastric cancer, bone marrow, metastasis*

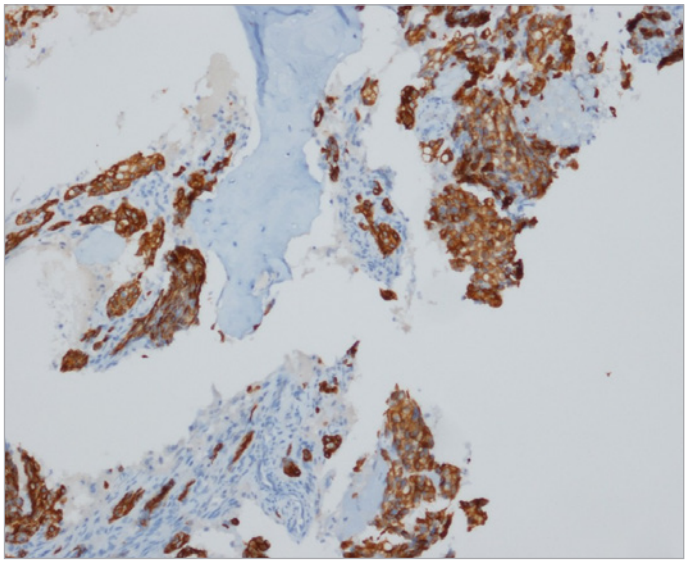

Figure 1. *Bone marrow infiltrated with gastric adenocarcinoma cells (CK7 staining ×100).*

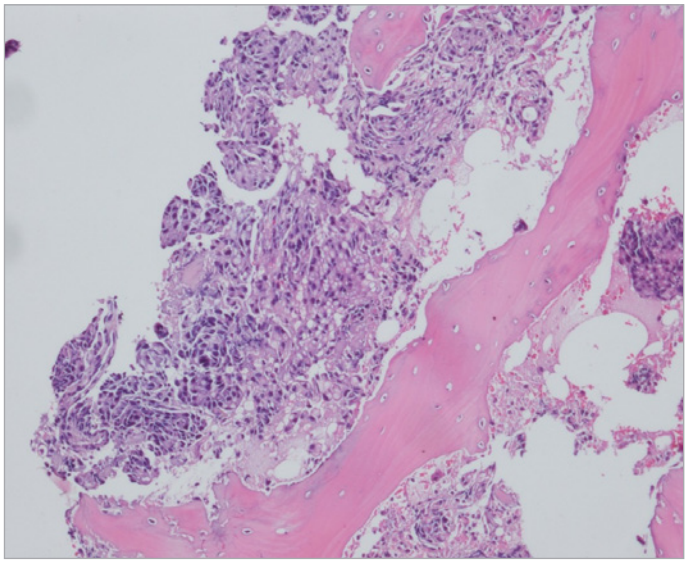

Figure 2. *Bone marrow infiltrated with gastric adenocarcinoma cells (hematoxylin and eosin (H&E) staining x100).*

[Abstract:2217]

OVERLAP SYNDROME AND OVARIAN NEOPLASMS

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Case Presentation: A 50-year-old woman with biphasic Raynaud's phenomenon, microstomia, sclerodactyly up to metacarpophalangeal joints and isolated vasculitic lesions in the thumb of the fingers without ulcers. She presented discrete elevation of IgG and IgA, ANA 1/640 with fine granular pattern and positive anti-Ku Ac, the rest of complementary studies were normal, so the diagnosis of overlap syndrome (systemic sclerosis-

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inflammatory myopathy or scleromyositis) was established. Five years after diagnosis, the patient presented with solidocystic ovarian neoplasia (Figure 1) with signs of peritoneal carcinomatosis and metastatic lymphadenopathy, together with incipient findings of fibrosing interstitial pneumopathy (Figure 2).

Discussion: Anti-Ku scleromyositis brings together features of inflammatory myopathy (IM) and systemic sclerosis. The risk of a patient with IM having an associated cancer has been related to certain clinical phenotypes and myositis-specific antibodies (MSA), being higher in those immune-mediated alterations not associated with MSA and being considered of low probability in patients with overlap syndrome with anti-PM/Scl and anti-Ku. The increased risk of neoplasia with respect to the general population is greater in the three years before or after the diagnosis of myopathy, with a certain predominance of gynaecological tumours.

Conclusions: It is important to perform screening for early detection of cancer in all patients with IM as an increased risk of cancer has been found.

Bibliography

1. Trallero Araguás, E., Miopatías Inflamatorias. En: Tratado de Enfermedades Reumáticas de la SER. 2ª edición. Madrid. Editorial médica Panamericana; 2022. p 506-516.

Keywords: *ovarian neoplasms, inflammatory myopathy, cancer*

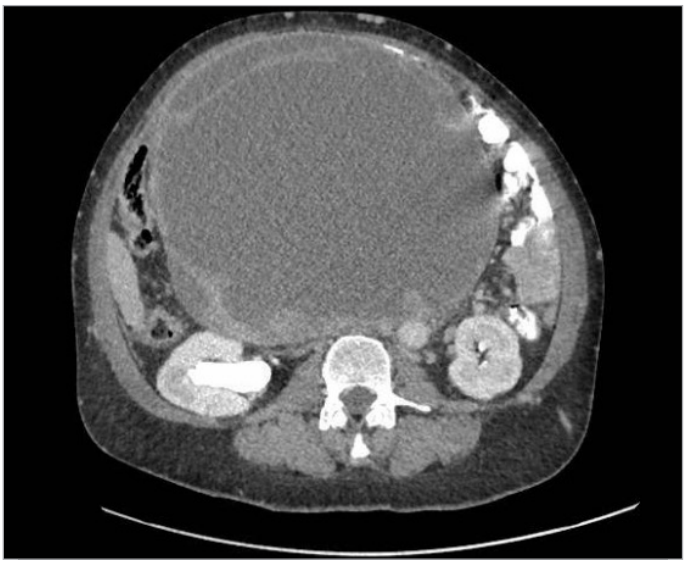

Figure 1.

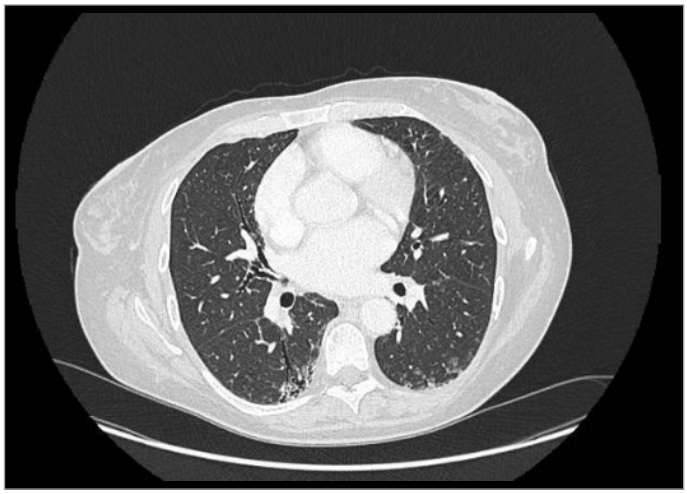

Figure 2.

[Abstract:2244]

UNCOMMON PRESENTATION OF NON-SECRETORY MULTIPLE MYELOMA

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Background: Non-secretory multiple myeloma (NSMM) is a rare haematological malignancy that presents with proliferation of plasmacytic cells that can't secrete or synthesize immunoglobulins.

Case Presentation: We herein report a case of a 63-year-old diabetic man presenting with deterioration of general condition. Blood analysis shows hypercalcemia, anaemia, thrombocytopenia, acute renal failure and severe cholestasis. Serum protein electrophoresis, serum immunofixation, and serum free light-chain assay were taken and exhibited normal results. He was diagnosed with multiple myeloma stage III of the International Staging System (ISS) after laborious bone marrow biopsy (plasmacytic cells infiltration > 60%). Body scan revealed diffuse scattered lytic lesions throughout the axial skeleton and abundant ascites. Normal results ruled out viral hepatitis and immunological liver disorders. Abdominal paracentesis was performed and showed exudative liquid with plasmacytic cell infiltration. The patient was advocated to receive dexamethasone-bortezomib-thalidomide protocol. While receiving the first cycle, he developed necrotic dermatohypodermia requiring antibiotics. The patient's condition progressed rapidly over a period of fifteen days and evolved to plasma acute leukaemia stage and ended up with poor outcome.

Conclusions: This report emphasizes the atypical extrarenal

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manifestations of NSMM (liver failure and myelomatous ascites); which reflects a more aggressive stage and poor prognosis.

Keywords: *non-secretory multiple myeloma, diagnosis, plasma cell leukaemia, liver involvement, ascites*

[Abstract:2246]

NIVOLUMAB-INDUCED AUTOIMMUNE CHOLESTATIC HEPATITIS: A CASE REPORT

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Case Description: A 53-year-old male patient with metastatic renal cell carcinoma and nephrectomy presented with jaundice, nausea, and vomiting. The patient had started nivolumab three weeks ago. Laboratory results showed elevated liver enzymes, up to 5 times above the upper normal limit. Total bilirubin was 22 mg/dL, and direct bilirubin was 19 mg/dL. Pre-treatment liver enzymes and bilirubin levels were within normal limits. MRI showed no abnormalities in the biliary tract. There was no history of liver disease or autoimmune disease, concomitant hepatotoxic medication, or herbal or alcohol use.

Clinical Hypothesis: A possible diagnosis of nivolumab-induced autoimmune cholestatic injury was sought.

Diagnostic Pathways: A liver biopsy was carried out, which revealed acute cholestatic-type liver injury with lymphocytic infiltrates and bile duct injury, consistent with nivolumab-induced cholestatic liver injury. Since the patient suffered from grade 4 hyperbilirubinemia, nivolumab was discontinued, and methylprednisolone was started at a dose of 1 mg/kg. After several weeks of treatment with methylprednisolone, the patient's bilirubin levels returned to normal.

Discussion and Learning Points: Immune checkpoint inhibitors, a promising new treatment modality, have significant immune-related adverse events. Nivolumab-induced hepatotoxicity is rare, and the diagnosis of nivolumab-induced liver toxicity is a diagnosis of exclusion, with both cholestatic and hepatocellular patterns have been reported. In grade 3 and 4 hepatotoxicities, immunosuppressive agents should be used: most patients respond to steroids as the mechanism is immune-mediated. Early recognition and ruling out other possible diagnoses of liver injury is beneficial for prompt initiation of immunosuppressives, which can reduce morbidity and mortality.

Keywords: *drug-induced autoimmune hepatitis, hepatotoxicity, immunotherapy-induced hepatotoxicity, nivolumab*

[Abstract:2276]

IMMUNOTHERAPY-RELATED LUNG AND DERMATOLOGIC TOXICITY IN A PATIENT WITH GASTRIC CANCER

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Immunotherapy, particularly the use of nivolumab, has become a cornerstone in the treatment of various malignancies. However, its association with immune-related-adverse-events presents diagnostic challenges. This report highlights a case where the clinical presentation and radiological findings initially suggested toxicity, but infectious processes couldn't be ruled out, leading to a critical decision-making-juncture. A patient with a history of gastric cancer presented with fever and respiratory symptoms after the 10th-cycle of folinicacid, fluorouracil, oxaliplatin chemotherapy along with nivolumab. Physical examination revealed a petechial skin appearance and fine rales in the middle zones of the lungs. Due to progressively increasing oxygen requirements, chest-CT was performed, which was interpreted as viral-pneumonia/toxicity-related-to-immunotherapy. Skin manifestations progressed to cover the entire back, spreading to the trunk, extremities. Dermatology performed punch-biopsy with preliminary diagnosis of erythema-multiforme/viral-eruption. However, the differential diagnosis included dermatitis related-to-immunotherapy. Given the predominant lung involvement and supported by skin involvement, the toxicity-related-to-immunotherapy was suspected. Methylprednisolone was added to the treatment at 1-2 mg/kg/day, totalling 80 mg intravenously. Empirical moxifloxacin was initiated due to significantly elevated inflammatory markers, C-reactive protein (69 mg/L) and procalcitonin (2.87 µg/L). Despite treatment, the patient rapidly developed an ARDS (Acute-Respiratory-Distress-Syndrome) picture within two days. Cultures, PCP-PCR, CMV-DNA, influenza, legionella all yielded negative results. Considering grade3-4 immunotherapy-related-lung-toxicity, Non-Invasive-Mechanical-Ventilation (NIMV) was initiated but escalated to intubation due to increased tachypnoea, dyspnoea, hypoxia, hypercarbia and transferred to intensive-care-unit (ICU). Therefore, IVIG (Intravenous-Immunoglobulin) administration at a dose of 2 g/kg was planned. After the first day of IVIG administration, a significant improvement in skin lesions was observed. The clinical condition improved after the 4th-day of IVIG treatment, allowing transfer to the regular service for ongoing care. In this case, distinguishing immunotherapy-related-toxicity from infectious processes, remains a challenge. However, in cases of rapid deterioration, considering this differential diagnosis becomes crucial to avoid delays in treatment. IVIG emerged as a successful intervention in this case, highlighting its potential role in managing severe immunotherapy-related-adverse-events.

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Keywords: *immunotherapy-related toxicities, nivolumab, pneumonitis, intravenous immunoglobulin*

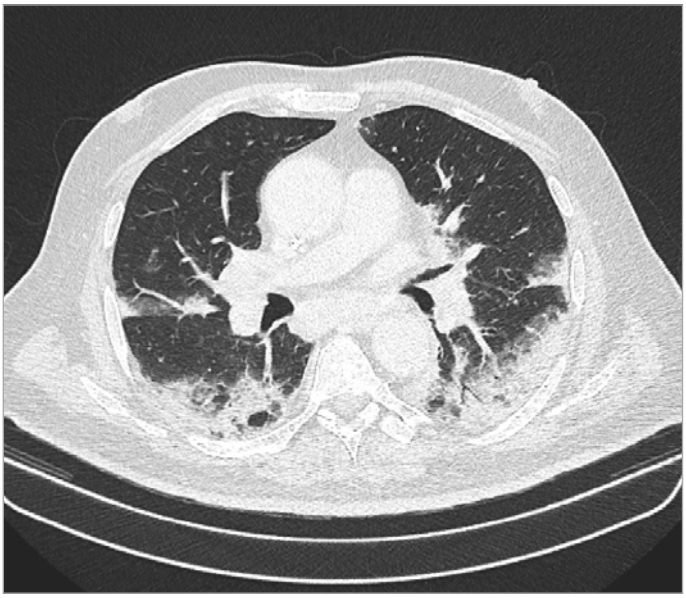

Figure 1. *Chest-CT.*
Immuntheraphy-related-toxicities.

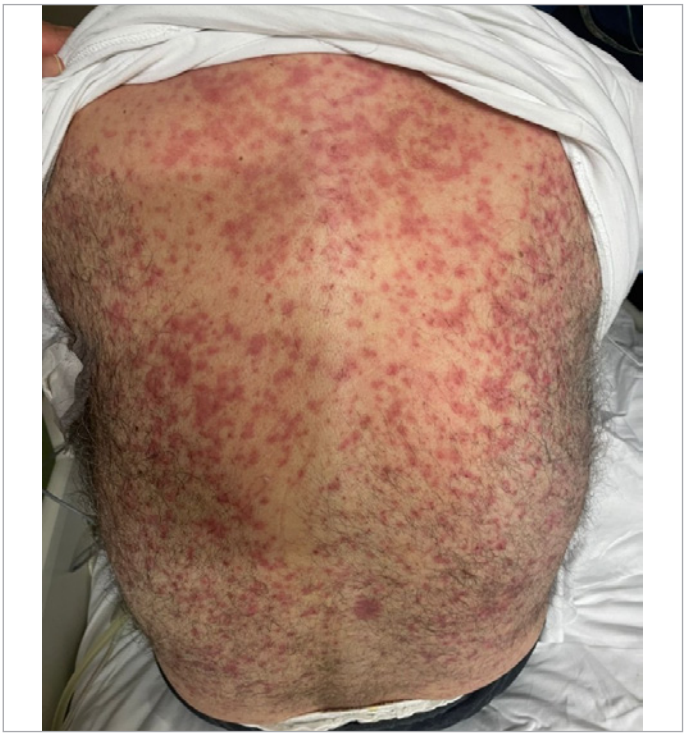

Figure 2. *Dermatological findings.*

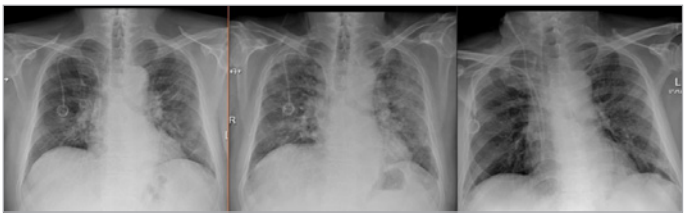

Figure 3. *Lung X-ray progression.*
1. First day 2. Second day 3. After IVIG administration.

[Abstract:2288]

FAMILIAL GLUCOSE 6 PHOSPHATE DEHYDROGENASE DEFICIENCY CASE SERIES

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Case Presentation: In this case series, we discuss three cases of G6PD (Glucose-6-phosphate dehydrogenase) deficiency. The patients in our series are of Turkish origin and include a father and two children a 48-year-old male, 19-year-old female and a 28-year-old male, respectively. The complaints of all three patients were abdominal pain and jaundice. The medical history revealed all family members consumed meat from their local village.
Clinical Hypothesis: Non-immune haemolytic anaemia.
Diagnostic Pathways: The examinations of three patients revealed anaemia, elevated indirect bilirubin and LDH (lactate dehydrogenase). Haemolytic anaemia was considered in anaemic patients with indirect hyperbilirubinemia and elevated LDH (lactate dehydrogenase). Patients with direct Coombs negative results were examined for non-immune haemolytic anaemia. G6PD (glucose-6-phosphate dehydrogenase) enzyme deficiency was detected in three patients investigated with the preliminary diagnosis of non-immune haemolytic anaemia.
Discussion and Learning Points: Glucose-6-phosphate dehydrogenase deficiency, the most common enzyme deficiency worldwide, causes a spectrum of disease including neonatal hyperbilirubinemia, acute haemolysis, and chronic haemolysis. Persons with this condition also may be asymptomatic. G6PD (glucose-6-phosphate dehydrogenase) enzyme deficiency can be asymptomatic and diagnosed in adulthood. It should be considered in patients with non-immune haemolytic anaemia.

Keywords: *glucose-6-phosphate dehydrogenase enzyme deficiency, haemolysis, jaundice*

[Abstract:2294]

CONSTIPATION, MORE THAN MEETS THE EYE

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Neoplasia often presents with bone metastasis, most commonly in breast, lung, and prostatic cancer. The clinical expression of bone metastasis is remarkably diverse and might mistake for benign osteoarticular pathology.
Case 1: 43-year-old black male, went to the emergency room with back pain, lower limb paresis and constipation. Spinal column computed tomography (CT) revealed a pathologic fracture of D8 with medullar compression with suspicion of bone metastasis of unknown primary neoplasia. Submitted to decompressive surgery,

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and performed a thoraco-abdominopelvic CT which revealed a hepatocellular carcinoma with bone and lung metastasis. After surgery paresis remained, and the patient died two months after the first admission.

Case 2: 58-year-old black male, went to the emergency room with abdominal pain in the upper abdomen with extension to the left lumbar region, anorexia, and abdominal distention. He was treated with analgesics without improvement; the blood tests showed a PSA of 62 ng/mL, with a normal abdominopelvic CT. He was discharged for follow-up in Urology appointment. However, 3 months later started with constipation, abdominal pain, and lower limb paraesthesia. Admitted to the ward, where he performed another CT and MRI showing an heterogenous prostate with countless lytic lesions. The final diagnosis was prostate neoplasia with bone metastasis. The patient died 4 months after the first admission.

Discussion: Masked symptoms, including constipation, should raise alarm for complex diseases, and demand special attention, being bone metastatic neoplasia a complex diagnosis, requiring prompt identification for attempting a better outcome.

Keywords: *neoplasm, bone metastasis, constipation*

[Abstract:2297]

THE TWO-IN-ONE LYMPHOMA PATIENT

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A 66-year-old male, with medical history of high blood pressure, obstructive sleep apnoea, dyslipidaemia, and psoriatic arthritis, taking adalimumab and methotrexate, was referred to Internal Medicine appointment due to a cervical mass accompanied by a productive cough with 3 month-evolution. B symptoms were absent. On physical examination he had a non-tender firm left lateral cervical lymph node, with 2 centimetres, fixed to the surroundings tissues.

The laboratory workup showed normal leukogram, without abnormalities in neutrophil and lymphocyte count.

Given the suspicion of ganglionic tuberculosis, a cervical ultrasound and a CT scan were performed, showing several enlarged lymphatic structures, the bigger with 16x10 mm. Suspended adalimumab. Koch bacillus cultures were negative.

The patient was then submitted to excisional biopsy of the biggest lymph node, revealing proliferation of T lymphocytes. The histology was suggestive of nodular Hodgkin lymphoma.

A positron emission tomography showed lymph nodes in the upper and lower side of the diaphragm, splenic enlargement and a hyperechogenic node in the right kidney. In the multidisciplinary session, synchronous neoplasia was hypothesized. The patient underwent kidney node biopsy, that showed an infiltration of lymphoid B cells suggestive of a renal lymphoma.

This case displays two different histological lymphoma types in an asymptomatic patient with a challenging diagnostic approach of a cervical mass and a personal history of multiple risk factors for the outgrowth of lymphoma, specifically psoriatic arthritis, and the use of biologic therapy. This clinical case highlighting that every therapy should be carefully weighted, including complex therapies such as biologicals.

Keywords: *adalimumab, methotrexate, hodgkin lymphoma*

[Abstract:2310]

THE SILENT EMERGENCY OF TUMOUR LYSIS SYNDROME

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Tumour lysis syndrome (TLS) is an oncologic life-threatening emergency caused by the release of large amounts of nucleic acids, potassium and phosphate into the bloodstream due to tumour cell lysis.[1] A 75-year-old female, with high blood pressure, atrial flutter, hyperthyroidism, chronic kidney disease, showing an axillar mass was sent to General Surgery appointment. She did a thoraco-abdominopelvic computed tomography which showed a voluminous left axillar mass with 61 mm of short-axis and multiple lymph nodes in the level I, II and III axillar and supraclavicular regions bilaterally. After 4 months she went to the emergency room with fever, night sweats, anorexia and adynamia, showing exuberant multiple adenopathies. The patient was admitted to the ward, with laboratory results showing normocytic normochromic anaemia with haemoglobin 10.7 g/dL, leucocytosis of 16.85 x10^9 cells/L, monocytosis 60.4%, thrombocytopenia of 123 x10^9 cells/L, hypoalbuminemia of 3.0 g/dL, acute kidney injury with creatinine 2.66 mg/dL and urea 79 mg/dL, and acute liver failure. The blood smear identified 49% cells suggestive of lymphoma. Blood immunophenotyping suggested non-Hodgkin lymphoma type B. However, clinical deterioration occurred, with hyperuricemia (21.6 mg/dL), hyperkalaemia (5.3 mmol/L), hyperphosphatemia (4.6 mg/dL), hypocalcaemia (7.5 mg/dL) and worsening of acute kidney and liver failure. TLS was assumed and the patient went to Intensive Care Unit. Despite treatment there was minimum response and the patient died.

The early recognition of TLS is crucial for preventing poor outcomes and should be a concerning diagnosis in neoplasms, especially in hematologic cancers such as lymphomas.

References:

1. Barbar T, Jaffer Sathick I. Tumour Lysis Syndrome. Adv Chronic Kidney Dis. 2021 Sep;28(5):438-446.e1. doi: 10.1053/j.ackd.2021.09.007. PMID: 35190110.

Keywords: *tumour lysis syndrome, oncologic emergency, lymphoma*

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[Abstract:2331]

MENINGEAL CARCINOMATOSIS AS THE INITIAL MANIFESTATION OF LUNG ADENOCARCINOMA

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Meningeal carcinomatosis is an uncommon and generally late form of metastasis, characterized by the infiltration of neoplastic cells into the subarachnoid space and leptomeninges. Clinical manifestations are varied and may indicate involvement of the entire neuroaxis. In addition to neurological symptoms and signs, diagnosis involves the analysis of cerebrospinal fluid (CSF) and neuroimaging exams. Treatment is not standardized and should be individualized, without ignoring the reserved prognosis of this form of metastasis.

A 66-year-old male patient was admitted with right eye amaurosis, headache, paraesthesia in the left hemicranium and ulnar nerve territory, vomiting, weight loss, and night sweats. Subsequently, he developed paralysis of the left III and VI cranial nerves, as well as flattening of the left nasolabial fold. He underwent a cranial and cerebral computed tomography (CT) angiography, which was inconclusive, and a lumbar puncture, which was positive for neoplastic cells. Due to the findings, he underwent a body CT, which revealed a suspicious nodule in the lingula consistent with lung adenocarcinoma.

This case stands out not only because it is an uncommon form of lung cancer metastasis but especially because it represents the initial manifestation. Its diagnosis is challenging and requires a high clinical suspicion, always to be considered when faced with multiple neurological deficits, as observed in this patient. In this situation, the immediate detection of neoplastic cells in the CSF analysis allowed for an early diagnosis but did not alter the prognosis.

Keywords: meningeal carcinomatosis, lung, adenocarcinoma

[Abstract:2340]

UNUSUAL DIAGNOSIS AFTER INTRAVENTRICULAR THROMBUS

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Male, 52 years old. Smoker of two packs/day. Recently evaluated by Otorhinolaryngology for right vocal cord paralysis, without seriousness data. He came to the emergency department for oedema in lower limbs with progressive dyspnoea until minimal effort of about ten days of evolution. On arrival, tachypnoea with oxygen saturation at 95% with nasal goggles at 2 lpm. The examination showed decreased generalized vesicular murmur and lower limbs with oedema with pitting up to the knees. Emergency laboratory tests showed NTproBNP 9395.7 pg/ml and D-dimer 5164 ng/ml. Chest CT angiography was urgently requested to evaluate pulmonary thromboembolism, with no evidence of filling defects in pulmonary arteries or their branches, visualizing adenomegaly in paratracheal and right hilar and subcarinal lymph node chains, as well as bilateral gynecomastia with nodular image of soft tissue in the left breast region. She was admitted to Internal Medicine to study the first episode of heart failure and the finding of intrathoracic lymphadenopathies. Echocardiogram (TTE) showed dilated cardiomyopathy with severe systolic ventricular dysfunction with global hypokinesia, maintaining better contractility in lower segments, appearing hyperreflective mobile nodular image intraventricular left, compatible with thrombus/mass, starting anticoagulation with enoxaparin, pending cardiac MRI. For further study of intrathoracic adenopathies we requested a complete blood test with proteinogram normal; Ca 15.3 of 207.2 U/mL and Ca 19.9 >60000 U/mL. In a staging CT scan we found mediastinal lymphadenopathy and bilateral gynecomastia with nodular image suggestive of neoplasia. BAG of the left breast was requested showing infiltrating carcinoma with vascular-lymphatic invasion, with immunohistochemical data of primary breast tumour.

Keywords: thrombus, breast, mediastinal adenopathies

[Abstract:2342]

A CASE OF PRIMARY AMYLOIDOSIS

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Background: Light chain (AL) amyloidosis stands as the prevailing manifestation of systemic amyloidosis, closely linked to an inherent plasma cell dyscrasia. Identifying this ailment poses a challenge due to its ambiguous and variable symptoms.

Case Presentation: A 70-year-old female presented with complaints of numbness and tingling in both hands and feet. She had no known chronic illnesses. The patient reported diarrhoea, recurring 3-4 times daily for the past year. Stool examinations revealed no pathology. Antral gastritis was observed during gastroscopy, colonoscopy revealed mild activation of colitis in the mucosa. Initial investigations revealed findings of normocytic anaemia, decreased levels of albumin and increased lactate dehydrogenase level. A renal ultrasound was conducted because there is proteinuria in the urine sample. The results indicated atrophy in the right kidney, while dimension of the left kidney was within normal limits. Electromyography revealed polyneuropathy and autonomic dysfunction. Imaging conducted for malignancy assessment showed pleural fluid in the lungs on tomography, but no solid organ tumours or pathological lymphadenopathy were observed. Pleural fluid was sampled and determined to

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be transudate in nature. Echocardiography revealed diastolic dysfunction. To further explore potential underlying causes, a bone marrow biopsy was performed, immunofixation was obtained. The biopsy revealed a clonal plasma cell infiltration with a lambda light-chain phenotype, suggestive of AL amyloidosis. Amyloid deposition consistent with AL amyloidosis was identified. Immunofixation correlated with the findings.

Conclusions: AL amyloidosis, although challenging to diagnose due to its diverse findings, should be considered in the elderly patients presenting with neurological, cardiac and gastrointestinal complaints.

Keywords: *amyloidosis, polyneuropathy, autonomic dysfunction*

[Abstract:2348]

SARCOIDOSIS PATIENT WITH LIVER MASS WAS DIAGNOSED WITH LYMPHOMA

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Case Description: A 50-year-old male diagnosed with sarcoidosis five months ago with an axillary lymph node biopsy resulting in granulomatous lymphadenitis. He presented with complaints of jaundice, fever, fatigue, and a 20 percent of weight loss over three months. He was icteric on physical examination, and his abdominal examination showed ascites. Laboratory indicated conjugated hyperbilirubinemia, elevated cholestatic enzymes, leukocytosis, anaemia, and elevated ferritin levels. Portal Doppler and ultrasound revealed multiple paranchymal liver masses. Liver dynamic magnetic resonance imaging (MRI) suggested a suspicion of malignancy. Positron emission tomography and computed tomography (PET-CT) showed numerous mediastinal and abdominal lymph nodes exhibiting FDG uptake, alongside lesions identified in previous liver imaging suggesting multifocal involvement of sarcoidosis as the most likely option. However, tru-cut biopsies of liver lesions resulted in a diagnosis of classical Hodgkin Lymphoma.

Clinical Hypothesis: The patient's symptoms and laboratory are not consisted and expected findings for sarcoidosis and further investigation was planned.

Diagnostic Pathway: Histopathological evaluation in cases of unclear or overlap pathologies going with similar clinical and laboratory findings is helpful.

Discussion and Learning Points: Malignancy should be considered in patients presenting with B symptoms. Differential diagnosis of sarcoidosis includes malignancies and especially lymphoproliferative disorders. In presence of unexpected findings detailed systemic screening is critical.

Keywords: *sarcoidosis, lymphoma, liver mass, extranodal*

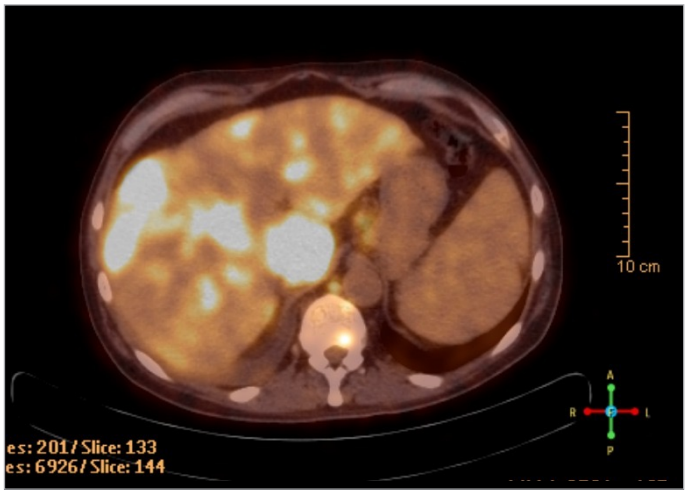

Figure 1. *PET-CT. Hepatic involvement of lymphoma.*

[Abstract:2349]

LUNG CANCER COMPLICATING PREGNANCY: A CASE REPORT OF SUCCESSFUL OPEN LOBECTOMY AT THE BEGINNING OF SECOND TRIMESTER

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Cancer during pregnancy is a rare condition with an annual incidence of 1:1000 to 1:1500 pregnancies. The most reported cancers are breast cancer, cervical cancer, malignant melanoma, lymphoma and leukaemia. There are few reports of lung cancer and in the most cases maternal outcomes were bleak due to advanced stage of diagnosis.

We report a case of 39-year-old non-smoking female patient who visited our hospital at 17 weeks of gestation, after the diagnosis of a suspicious pulmonary mass at the beginning of the pregnancy. Chest radiography and computer tomography with abdominal shielding revealed an enlarged abnormal lesion with consolidation (3.8x2.6 cm) in the right lower lung lobe. No interlobar nodes appeared metastatic. The bronchoscopy revealed a central vascular-rich mass within the right lower segmental bronchus. Due to the increased risk of bleeding a biopsy was not performed but the bronchoscopic image directed the diagnosis toward neuroendocrine lung carcinoma. Bone scan and positron emission tomography were not performed because of the radiation exposure risk of the fetus. A right lower lobectomy with mediastinal lymph node dissection was successfully performed with an open thoracotomy approach. In histopathology the initial diagnosis was assured, the tumour diagnosed as a neuroendocrine cell carcinoma and a satellite metastatic was identified in the same lobe.

The postoperative patient's and foetal status were uneventful. The patient discharged 1 week after the operation.

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The diagnosis and treatment of cancer during pregnancy is challenging. There are only two medical reports of surgical resection of lung cancer during pregnancy, as in all cases the treatment was performed postpartum.

Keywords: *lung cancer, pregnancy, open lobectomy, second trimester*

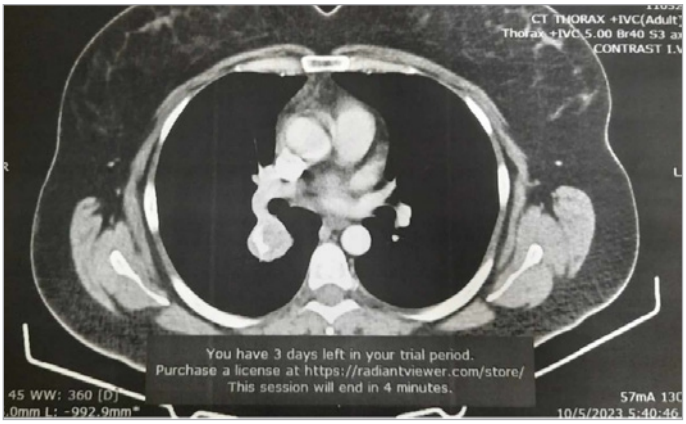

Figure 1. *A thoracic CT scan of a mass like lesion with consolidation in the lower right lung lobe.*

[Abstract:2356]

THE SKIN HYDROXYUREA LIVES IN: CONFRONTING RECURRENT SQUAMOUS CELL CARCINOMAS IN A HYDROXYUREA-TREATED PATIENT WITH POLYCYTHEMIA VERA

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HU (hydroxyurea) is widely used in the treatment of various hematologic disorders and data suggest a potential association between long-term hydroxyurea treatment and an increased risk of skin lesions, including cutaneous malignancies. Herein, we report a case of recurrent SCCs (squamous cell carcinomas) in a HU-treated patient with PV (polycythemia vera).

A 70-year-old male PV patient presented with actinic keratoses, with multiple lesions involving the face and the scalp, while being on HU treatment for six years. A biopsy of a forehead lesion revealed the presence of SCC, which was cryosurgically removed. After nine months, the patient presented with an ulcerative lesion of the right hand, with a biopsy confirming a diagnosis of SCC, which was surgically treated. Due to HU intolerance, he had his treatment discontinued and was started on ruxolitinib. The patient yielded an excellent response to ruxolitinib and multiple skin lesions retreated within six months. However, two years after HU discontinuation, a new ulcerative lesion of the right hand and a new periorbital lesion emerged, with biopsies confirming again the presence of SCCs. After five months, the patient passed away due to metastatic SCC.

Briefly, patients receiving HU should undergo regular monitoring, including skin examination for the early detection of potential skin lesions. Furthermore, occurrence of malignant skin lesions should prompt HU discontinuation and patients should continue undergoing regular monitoring even after treatment discontinuation.

Keywords: *hydroxyurea, squamous cell carcinoma, skin cancer*

[Abstract:2363]

MULTIPLE MYELOMA WITH AN UNUSUAL PRESENTATION

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IgA multiple myeloma (MM) represents the second most common subtype of MM (21%), with an average age at diagnosis of 65 years. Signs or symptoms are related to the infiltration of plasma cells into the bone or renal failure due to immunoglobulin deposition.

A 48-year-old woman (history of hypothyroidism and chronic gastritis) presented to the emergency department with weight loss and localized bone pain in the ribcage and torso/lumbar region, for eight months. Denied fever or night sweats. Physical examination: discomfort upon palpation of the upper abdominal quadrants; no palpable masses, organomegaly, lymphadenopathy, and no sensory deficits on neurological examination. Laboratory Result: normocytic normochromic anaemia (Hb 11.9 g/dL), elevated sedimentation rate (120 mm/h), beta-2 microglobulin elevation (3.62 ng/mL), calcium (10.4 mg/dL), normal renal function. Protein electrophoresis revealed a monoclonal peak of 2.6 g/dL, and serum immunofixation showed a monoclonal IgA (Lambda) component. A 24-hour urine test indicated proteinuria (477.3 mg/24h), immunofixation revealed the presence of Bence Jones lambda. Bone marrow examination revealed 67% plasma cells. Imaging assessment of the skeleton showed a “salt and pepper” sign in the skull and multiple osteolytic lesions in the spine. The diagnosis was IgA lambda multiple myeloma with extensive bone involvement. Treatment with dexamethasone, bortezomib, and lenalidomide was initiated.

This case illustrates the diagnosis of IgA multiple myeloma occurring at a younger age, presenting with extensive bone involvement, without significant renal dysfunction or severe hypercalcemia. Important reminder for cases with refractory bone pain, where individualized clinical approach may result in early diagnosis.

Keywords: *IgA multiple myeloma, bone pain, lambda*

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[Abstract:2385]

MEDIASTINAL MASS

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Introduction: Mediastinal masses are uncommon and include a wide histopathological spectrum, ranging from benign to malignant. Most occur in the anterior compartment, the most common being thymoma, teratoma, lymphoma and goitre. A "standard" approach is not appropriate. Attention to age and gender, combined with the identification of certain clinical and imaging characteristics, allows an initial presumptive diagnosis to be established in most patients.

Case Presentation: A 32-year-old woman from Brazil, living in Portugal since 2019, with no relevant medical history. She presented with fatigue and dyspnoea on increasing exertion, orthopnea and non-productive cough, with no deterioration in her general condition and no other accompanying signs and symptoms. On examination, only submandibular and cervical adenopathies palpable. Chest CT scan documented a large expansive lesion, with soft tissue density, filling the anterior mediastinum, superior mediastinum and right lateral pericardial aspect, causing left heart deviation with involvement of the superior vena cava and right great pulmonary vessels, with pericardial and pleural effusions. Anatomopathological examination of the mediastinal mass revealed classic Hodgkin's lymphoma, nodular sclerosis. She was transferred to the Hematology Department, to chemotherapy with ABVD (adriamycin, bleomycin, vinblastine and dacarbazine) and follow up.

Discussion: Mediastinal masses are uncommon and usually incidental findings and therefore primary mediastinal classical Hodgkin's lymphoma is rare. Nodular sclerosis is the most common subtype involving the mediastinum and/or mediastinal nodes. Diagnosis can be challenging, which is why a structured approach combining clinical and imaging data makes it possible to narrow down and focus the diagnostic assessment of these patients.

Keywords: *mass, mediastinal, haematology*

[Abstract:2401]

CONSTITUTIONAL SYNDROME AND SKIN LESIONS, PAYING ATTENTION TO DETAIL

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76-year-old woman with history of smoking, osteoarthritis and left hip replacement. Presents with skin changes and weight loss (10 kg) in the previous months. Recent haematology consultation for gingival bleeding ruling out coagulopathy. Examination shows ecchymosis in the face and thorax (figure 1), and right submandibular swelling.

Complete evaluation for constitutional syndrome is performed. Blood tests show normal renal function and electrolytes, mild anaemia. Whole body CT demonstrates diffuse peritoneal involvement with no specific features (figure 2). PET-CT confirms both the submandibular and peritoneal lesions are metabolically active (figure 3). Gin ecological evaluation reveals no significant alterations.

Neuropathic pain and dysesthesias in the limbs become apparent, an electromiographic study is performed confirming mixed sensorimotor polineuropathy with axonal predominance (in both median and deep peroneal nerves). Extended blood workup shows free lambda chain monoclonal gammopathy with an elevated beta2 microglobulin. An underlying haematological malignancy is suspected.

Biopsies of the oral mucosa and skin confirm the presence of primary amyloidosis. A further bone-marrow biopsy confirms multiple myeloma with a 50% infiltration.

Final diagnosis of multiple myeloma with primary systemic amyloidosis.

The patient was derived to haematology for evaluation and treatment, and started on daratumumab, lenalidomide and dexamethasone.

This case underlines the importance of a thorough evaluation in patients with constitutional syndrome, where symptoms such as limb dysesthesias may be overlooked or attributed to a previous diagnosis (such as carpal tunnel syndrome), when they can in fact precede other symptoms and allow an earlier detection of the disease (1).

References:

1. doi: 10.1253/circj.CJ-23-0223

Keywords: *amyloidosis, constitutional syndrome, ecchymosis*

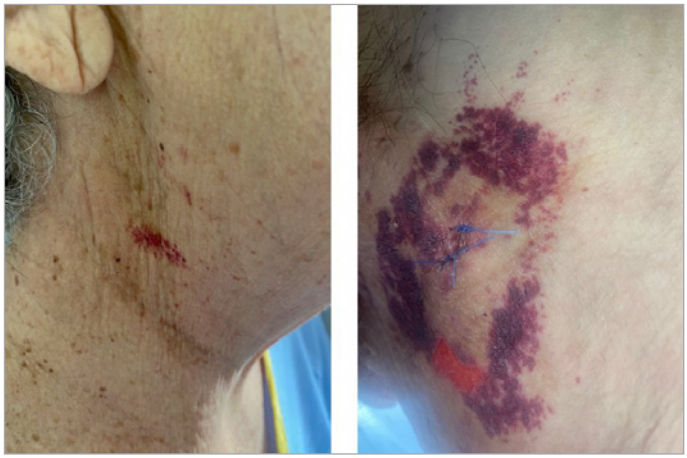

Figure 1. *Ecchymosis seen on the patient, the right picture shows the site of the skin biopsy.*

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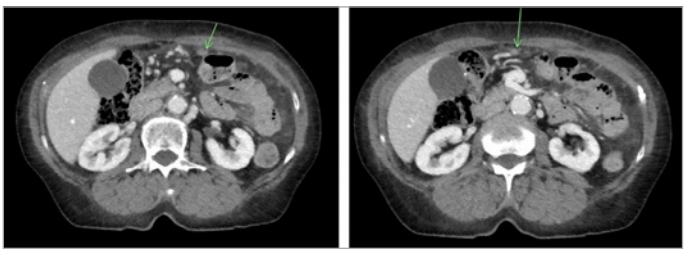

Figure 2. CT scan with diffuse peritoneal involvement of a non-specific nature.

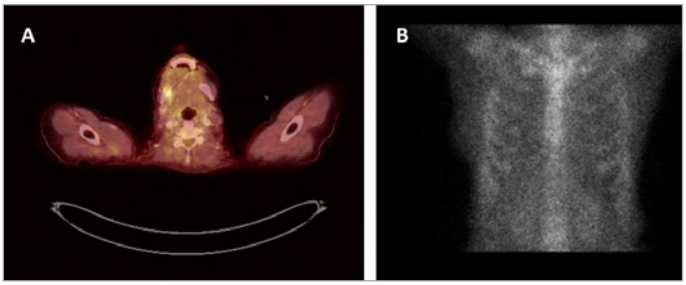

Figure 3. A) PET- CT scan with right submandibular lesion. B) Cardiac Scintigraphy with Technetium with no cardiac involvement. Cardiac ultrasonography was also performed with no significant alterations.

[Abstract:2414]

ESSENTIAL THROMBOCYTHEMIA WITH PORTAL VEIN THROMBOSIS – A CASE REPORT

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Case Description: A 27-year-old man presented to the emergency department with abdominal pain. His medical history did not include any previously known diseases. Initial bloodwork showed thrombocytosis and an elevation in C-reactive protein. Abdominal CT scan revealed massive splenomegaly and ascites. Abdominal-USG and portal vein Doppler-USG showed splenic vein dilatation, collateral circulation, portal hypertension, and portal venous thrombosis. Further investigations revealed jugular venous thrombosis and axillo-subclavian vein thrombosis. A gastroscopy showed grade-3 esophageal varices.

Clinical Hypothesis: Chronic myeloproliferative disease.

Diagnostic Pathways: Minimal ascites was not suitable for paracentesis. Liver function tests, GGT, ALP and bilirubin, ceruloplasmin and 24-hour cupper were in normal range. Serologic tests were negative for viral hepatitis. Thrombocytosis was not compatible with chronic liver disease. For thrombosis, we considered hereditary and inherited disorders. Homocysteine levels were within the normal range. Flow cytometry was negative for paroxysmal nocturnal haemoglobinuria. Colonoscopy was unremarkable. Antiphospholipid antibodies were negative. Lack of proteinuria ruled out nephrotic syndrome. Genetic study revealed that the mutations BCR-ABL1, CALR EXON9, and JAK2 EXON 12 were all negative. JAK2 EXON 14 V617F mutation (8.62%) was consistent with chronic myeloproliferative diseases. Subsequently, the patient was referred to haematology department. Bone marrow biopsy results were consistent with essential thrombocythemia.

Discussion and Learning Points: Widespread thrombosis likely occurred in the context of thrombocytosis due to essential thrombocythemia. This led to portal venous thrombosis, portal hypertension, ascites, and oesophageal varices. Despite the presence of massive splenomegaly, the detection of thrombocytosis was an alarming symptom that guided us to the diagnosis.

Keywords: portal vein thrombosis, essential thrombocythemia, JAK-2 mutation

[Abstract:2449]

DIAGNOSIS OF TRIPLE-NEGATIVE PRIMARY MYELOFIBROSIS WITH KARYOTYPING

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A 47-year-old female, with free known medical history, presented to the emergency department with acute dyspnoea. On evaluation, computed tomography (CT) of chest and abdomen were performed, which ruled out pulmonary embolism and revealed hepatomegaly (30 cm) and massive splenomegaly (27 cm). Laboratory findings revealed elevated LDH levels, microcytic hypochromic anaemia (hb=8.5 g/dl) and thrombocytosis. The peripheral blood smear showed dacrocytes.

The differential was a systemic disease (hematologic or autoimmune disorder), infection and cancer.

Extended work up was performed, that ruled out haemolysis, portal hypertension and infection. Immunological tests, serum and urine protein electrophoresis and immunofixation and serum free light chain (FLC) ratio were normal. Due to hepatosplenomegaly, anaemia, dacrocytes and elevated LDH, myelofibrosis was suspected. The peripheral blood immunophenotype did not reveal clonality. A bone marrow aspirate and biopsy took place and the latter showed findings either of primary myelofibrosis (PMF) or secondary myelofibrosis. Thorough imaging testing was performed to exclude cancer. Molecular testing for JAK2, CALR, MPL and BCR-ABL mutations was negative. The karyotype of bone marrow, revealed deletion of the long arm of chromosome 20, from zone 20q12 to zone 20qter: 46,XX,del(20)(q12)[3]. The diagnosis of PMF was confirmed.

The diagnosis of PMF is confirmed by detecting a mutation in JAK2, CALR, or MPL. In some cases, none of these mutations is

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expressed (triple-negative myelofibrosis). In this case, we highlight the rare scenario of the negative molecular testing and that the chromosome analysis was the one that confirmed our diagnosis.

Keywords: *myelofibrosis, hepatosplenomegaly, karyotyping, molecular test*

[Abstract:2491]

PATIENT WITH PARESTHESIAS IN CHIN AND LOWER LIP

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A 74-year-old man with a history of COPD and ischaemic heart disease, ex-drinker and ex-smoker who consulted for paresthesia in the lower lip and chin for the last two weeks, without lesions in the affected area, previous trauma or other neurological symptoms. The patient reported no other symptoms apart from mild constitutional symptoms, with hyporexia and a loss of about 5 kg in the last two months. Laboratory results revealed an LDH concentration of 1500 U/L and a CRP of 187 mg/L, while the other biochemical parameters and the haemogram were normal. A body-CT scan was requested, which revealed multiple supra- and infradiaphragmatic adenopathies, splenomegaly and mesenteric panniculitis, suggestive of a lymphoproliferative process. Echoendoscopy was performed to biopsy the lymphadenopathies, visualising a previously undescribed duodenal thickening, which was also biopsied. The final diagnosis was high-grade B lymphoma with intestinal infiltration. To complete the study, a PET-CT scan was performed, which revealed multiple pathological foci in lymph nodes and in the entire skeletal system (skull, spine, ribs, pelvis, humerus and femurs), as well as muscular, gastric and pancreatic involvement. A bone marrow biopsy was also performed and confirmed a massive lymphomatous infiltration.

During the study, the patient experienced rapid clinical deterioration, presenting with high intestinal under-occlusion, renal failure secondary to spontaneous tumour lysis syndrome (with elevated creatinine, phosphate, potassium and uric acid levels), anaemia with a haemoglobin concentration of 6.8 g/dl, lymphopenia and severe generalised bone pain until he finally died before specific treatment of the underlying pathology could be initiated.

Keywords: *numb chin syndrome, neoplasia, lymphoma*

[Abstract:2509]

DETERMINATION OF FACTORS INCREASING THROMBOSIS RISK IN BCR-ABL NEGATIVE MYELOPROLIFERATIVE NEOPLASMS AND COMPARISON OF THROMBOSIS RISK SCORING SYSTEMS

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Objective: This study addresses myeloproliferative neoplasms (MPNs), heterogenous stem cell disorders predominantly affecting adults, characterized by abnormal blood cell production. Thrombosis, a major cause of morbidity and mortality in MPNs, is the primary focus of our retrospective analysis. We aim to evaluate demographic, diagnostic, and genetic factors in BCR-ABL1 negative MPN patients and assess the applicability of thrombosis scoring systems, including IPSET and r-IPSET, across all MPNs.

Materials and Methods: Patient files of 294 individuals aged 18 and above, diagnosed with BCR-ABL1 negative MPNs between November 2016 and December 2022 at Gulhane Training and Research Hospital Hematology Clinic, were retrospectively analysed. Demographic information, biochemical parameters at diagnosis and during thrombosis, and genetic results were recorded. Thrombosis risk assessments using standard scoring, IPSET, and r-IPSET were conducted. Statistical analyses were performed using SPSS 20.0, presenting data as mean ± standard deviation ($p<0.05$).

Results: Among patients with a mean age of 54.54±16.25 years, thrombosis was observed in 21.8%, with 59.3% being arterial, 32.8% venous, and 15.6% both. Notably, 75.2% of thrombotic events occurred within six months from diagnosis. JAK2 mutation prevailed (73.12%), correlating with increased mean platelet volume and decreased albumin. All applied scoring systems demonstrated statistically significant predictive capacity. The follow-up period revealed a 12.9% mortality rate, significantly associated with thrombosis.

Discussion: Associations between MPV, albumin, and thrombosis prompt considerations for refining scoring systems. The study suggests that heightened diagnostic sensitivity in chronic proliferative MPNs may mitigate thrombotic complications and impede myelofibrosis progression.

Keywords: *myeloproliferative neoplasm, polycythemia vera, essential thrombocytosis, primary myelofibrosis, thrombosis, scoring*

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[Abstract:2511]

EXTRANODAL VERTEBRAL MASS: AN UNUSUAL PRESENTATION OF HAIRY CELL LEUKAEMIA

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Background: Hairy cell leukaemia (HCL) is an uncommon, indolent, B cell, lymphoproliferative disorder typically involving peripheral blood, spleen and bone marrow. It's commonly affiliated with pancytopenia, monocytopenia and massive splenomegaly. HCL presents in middle age, accounting for 2% of lymphoid leukaemia. Cases of extranodal lesions caused by HCL are rare, though have been reported. Herein, we report a case of hairy cell leukaemia presenting as a vertebral mass without systemic involvement.

Methods: A 58-year-old man admitted to our hospital due to progressive difficulty walking for a month, without any other symptoms. No significant medical history was noted aside cigarette smoking. Neurological examination revealed reduced muscle strength and exaggerated deep tendon reflexes in both lower limbs. Blood examination noted mild anaemia with Hb=12,6g/dl and mild thrombocytopenia of 140.0000/μl. MRI imaging demonstrated a T6 posterior vertebral mass lesion, extending into the spinal canal with metastatic bone lesions along thoracic and lumbar spine. Further imaging study with CTs indicated mild splenomegaly (13.4 cm) and an enlarged abdominal lymph node (3.5 cm) near celiac trifurcation.

Results: A vertebral mass biopsy was performed. Results showed small-sized cells with round or oval nuclei, and pale cytoplasm with immunophenotype: B-cell origination with CD20+, CyclinD1+, DBA.44+, Annexin+, BRAF+ indicative of HCL.

Conclusions: HCL may has atypical presentations including symptoms from spinal canal compression. When HCL presents as an isolated extranodal mass, the diagnosis can be challenging. An adequate biopsy specimen is critical for distinguishing HCL from other more common lymphoproliferative, plasma cell disorders or primary bone tumours.

Keywords: *hairy cell leukaemia, vertebral mass, biopsy*

[Abstract:2521]

DESCRIPTION OF THE CHARACTERISTICS, TREATMENT AND PROGNOSIS OF PATIENTS WITH A DIAGNOSIS OF SPACE OCCUPYING BRAIN INJURY IN THE HOSPITAL PUERTA DEL MAR

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We conducted a retrospective descriptive study of patients over 18 years of age who arrived at Hospital Puerta del Mar from the whole province of Cadiz and Ceuta from January 2022 to May 2023 with a diagnosis of brain space-occupying lesion, collecting demographic characteristics, CVRFs on admission, characteristics of the lesions, treatment performed and evolution during the following 6 months from diagnosis.

Of the 55 patients, 38.2% were female and 61.8% were male. 69.1% were between 50 and 75 years of age and only 1.8% were under 25 years of age. 90.7% were admitted for the study and 52% of the patients were admitted to the internal medicine department. Focusing on CVRFs, 50.9% were hypertensive, 27.3% diabetic, 38.2% dyslipidaemia and 48.1% were smokers or ex-smokers.

Thirty-six brain biopsies were performed of which 3.2% were found to be low-grade glioma, 74.2% high-grade glioma, 12.9% meningiomas and only 6.5% were compatible with lymphomas.

With regard to treatment once the aetiological diagnosis of brain space-occupying lesion had been established, surgery alone was performed in 10% of cases, radiotherapy in 12%, radiochemotherapy in 22%, surgery plus radiochemotherapy in 24%, chemotherapy alone in 2%, and immunotherapy or other treatment in 6%. Palliative treatment was considered in 24% of the patients due to the clinical condition of the patient or because it was a rapidly progressive advanced disease with a poor short-term prognosis. Six months after diagnosis, 50% of the cases showed a favourable evolution, 11.5% were on palliative symptomatic treatment and 38.5% unfortunately died.

Keywords: *brain space-occupying lesion, neoplasia, hospital Puerta del Mar*

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[Abstract:2528]

X FILE: A CASE REPORT OF ANASARCA AND CONSTITUTIONAL SYNDROME CULMINATING IN MULTIORGAN FAILURE DUE TO INTRAVASCULAR LYMPHOMA

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We present a 69-year-old woman admitted to internal medicine for the investigation of a first episode of anasarca and constitutional syndrome. After ruling out cardiac, hepatic, and renal diseases, the suspicion focuses on a protein-losing enteropathy. She has no significant history or chronic medication.

Upon physical examination, she appears to be in an acceptable overall condition. She has generalized subcutaneous oedema, and auscultation reveals generalized hypoactive breath sounds.

In the laboratory analysis, notable values include WBC: 17.93, neutrophils: 16.55, albumin: 2.5, sodium: 124, LDH: 2771, B2 microglobulin: 5.38, hypogammaglobulinemia, CRP: 4.5, PA: 43%, INR: 1.8. Chest X-ray, urine analysis, and abdominal ultrasound are all normal.

A whole-body CT scan and PET-CT, showed no evidence of disease. Digestive endoscopy only highlights atrophic gastritis. The patient experiences respiratory worsening, elevation of APR, leading to the initiation of empirical antibiotic therapy. She requires admission at the ICU. Remains with fever, coagulopathy, anaemia, and thrombocytopenia requiring transfusion. She succumbs to multiorgan failure secondary to sustained shock.

Post-mortem, the bone marrow biopsy reveals hemophagocytosis. A necropsy diagnoses intravascular lymphoma with involvement of the skin, intestine, bone, liver, pancreas, and breast.

Conclusions: 1. Despite comprehensive diagnostic efforts, the patient's condition remained elusive, highlighting the complexity of diagnosing rare diseases with diverse organ involvement.

2. Multiorgan failure underscore the aggressive nature of intravascular lymphoma, emphasizing the need for timely and targeted interventions.

3. The post-mortem discovery of hemophagocytosis underscores the diagnostic challenges and the importance of considering atypical presentations to improve the recognition of aggressive hematologic malignancies.

Keywords: *hemophagocytic syndrome, intravascular lymphoma, Salamanca, internal medicine*

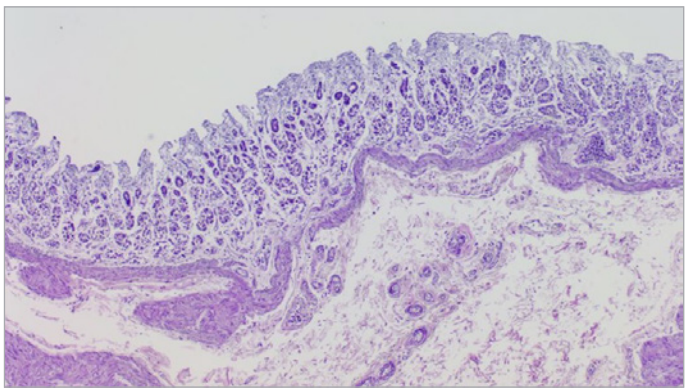

Figure 1. *Atrophic gastritis.*

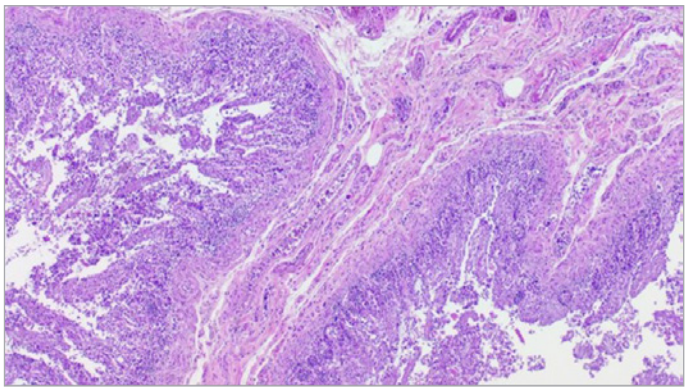

Figure 2. *Infiltration by intravascular lymphoma in duodenum.*

[Abstract:2536]

CUTANEOUS FEATURES IN EXTRANODAL NK/T CELL LYMPHOMA: A RARE PRESENTATION

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NK/T-cell lymphoma is a rare and aggressive subtype of non-Hodgkin lymphoma (NHL), more prevalent in Asia and Central America. In Europe, it represents 5-10% of all NHL cases, with an annual incidence of 1.13/100000 inhabitants. It occurs more frequently in males and affects all ages. This lymphoma is closely associated with Epstein-Barr virus (EBV) infection and frequently has extranodal manifestation (extranodal NK/T-Cell Lymphoma - ENKTL), with nasal involvement being the most common. Cutaneous involvement is unusual, however it may arise during the course of nasal type ENKTL and is also the most frequent presentation in extranasal types. With this case, the authors aim to raise awareness of this entity, its diagnostic challenges, and the need for recognition for prompt therapeutic guidance.

We report the case of an 82-year-old man presenting ulcerated

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cutaneous lesions associated with constitutional symptoms, over the course of three weeks. Notable findings include positive serology for EBV infection, biopsy of the skin lesions revealing cutaneous infiltration by NK/T-cell lymphoma, and positron emission tomography-computed tomography (PET-CT) suggesting active lymphomatous disease involving the skin and bone marrow, excluding nasal involvement. He underwent six sessions of chemotherapy (miniCHOP) and a PET-CT conducted one-month post-treatment showed disease remission.

The appearance of cutaneous lesions associated with constitutional symptoms in the presence of EBV infection should raise suspicion for ENKTL. However, the diagnosis can only be confirmed by biopsy of cutaneous lesions. PET-CT should be performed on all patients diagnosed with ENKTL to evaluate nasal involvement, given that is its predominant form.

Keywords: *cutaneous, extranodal NK/T cell lymphoma, lymphoma, non-Hodgkin lymphoma, Epstein-Barr virus infection*

[Abstract:2557]

SYNDROME OF ANTISYNTHETASES REVEALING BREAST CARCINOMA

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Introduction: Cancer-associated myositis is defined by the discovery of myositis within approximately three years of a neoplasm diagnosis.

Observation: F.K, 73 years old, admitted for exploration of myalgias with muscle weakness. Clinical examination: bilateral proximal weakness in all four limbs, confirmed by electromyoneurography Biologically: rhabdomyolysis with creatine phosphokinase: 854 IU/L.

Immunological assessment showed antisynthetase antibodies, specifically anti-Jo1, at 349 IU/L. Anti-PL7, anti-PL12, and anti-SRP antibodies were negative. Sonological examination: hard mass measuring approximately 3 cm in the left breast with an orange peel appearance. Within this nosological framework and given the clinical anomalies, a mammogram, complemented by a breast biopsy: infiltrating carcinoma of non-specific type, grade 2.

Discussion: While the presence of dermatomyositis, polymyositis, and necrotizing myopathy warrants the search for neoplasia, the literature lacks evidence linking antisynthetase syndrome (ASS) to cancer. However, several studies have attempted to establish this connection.

Castaneda-Pomeda et al. reported a 14% prevalence of neoplasia in a cohort of 28 patients, with an average age of 72, diagnosed with ASS. However, the average diagnostic interval between cancer and myositis was 55 months (ranging from 16 months to eight years) in elderly subjects. These durations do not categorize these myositis cases as cancer-associated. To date, there is no statistical evidence of an increased neoplastic risk in patients with antisynthetase syndrome. Nevertheless, in an ASS patient, a comprehensive clinical examination is essential to guide imaging.

Conclusions: Our observation raises the question of a potential link between antisynthetase syndrome and neoplasia.

Keywords: *carcinoma, antisynthetase syndrome, myalgias*

[Abstract:2569]

EXAMINING RISK FACTORS IN THE DEVELOPMENT OF ANAEMIA IN CRITICALLY ILL PATIENTS IN INTENSIVE CAR

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

Aim: We aimed to study the causes and treatment of anaemia in patients without it upon ICU admission at Ankara City Hospital, who stayed for at least 72 hours and developed anaemia later.

Materials and Methods: A retrospective-observational study including 179 critically ill patients who were hospitalised in the 2nd and 3rd step ICU of SBU Ankara Bilkent City Hospital, who did not develop anaemia in the first 72 hours of their hospitalisation and who developed anaemia after 72 hours were included.

Findings: Of 179 patients, 50.8% (n=90) were female and 49.7% (n=89) were male. The mean age of the participants was 71.47±15.17 years and 71.6% of the patients were 65 years and older. The mean haemoglobin value in the blood samples taken on the day of admission was 13.84±1.01. The mean days of onset of anaemia after ICU hospitalisation was 7.09±4.02. The mean haemoglobin value recorded on the day of anaemia was 11.37±7.69. Gastrointesinal bleeding developed in 15.1% of the patients during their hospitalisation. Oral nutrition rate was 57% in 179 patients.

Conclusions: According to regression analyses, patients had underlying malignancy (p=0.025), sepsis (p<0.001), cirrhosis (p=0.027); patients had carbapenem (p<0.001), teicoplanin (p<0.001), antifungal (p=0.005), polymyxin (p=0.003) use; patients had transfusion history (p=0.005); Low diastolic blood pressure (p=0.025), low pulse rate (one unit decrease in pulse rate increases mortality 1.039 times) (p=0.001), catheterisation during or before ICU admission (p=0.001), lack of oral nutrition (p=0.002) and TPN use (p=0.015) were found to be risk factors for mortality.

Keywords: *anaemia, ICU, critical patients*

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		Anaemia onset day		
		Ort ± SS	Medyan IQR)	p
Yaş grup				
<65	49	7.02±3.69	6 (4-9)	0.693
≥65	130	7.12±4.15	6 (5-8)	
Cinsiyet				
Kadın	90	6.72±3.39	6 (4-8)	0.261
Erkek	89	7.47±4.56	6 (5-9)	
DM				
None	121	7.16±4.15	6 (4-8)	0.862
Var	58	6.97±3.77	5.5 (5-7)	
HT				
None	83	7.28±4.46	6 (4-9)	0.958
Var	96	6.94±3.60	6 (5-7)	
KAH				
None	107	7.52±4.59	6 (5-9)	0.366
Var	72	6.46±2.88	6 (4-7)	
ABH				
None	89	7.16±4.36	6 (4-8)	0.919
Var	90	7.03±3.67	6 (5-8)	
KBH				
None	150	7.01±4.07	6 (4-8)	0.141
Var	29	7.52±3.78	6 (5-8.5)	
SVO				
Yok	142	7.25±4.26	6 (4-8)	0.563
Var	37	6.49±4.87	6 (5-8.5)	
Siroz				
None	153	6.87±3.94	6 (4-7)	**0.039**
Var	26	8.42±4.29	7 (5-12)	
İskemik Hepatit				
None	173	7.10±4.06	6 (4-8)	0.687
Var	6	6.83±2.78	6.5 (5-8)	
Pulmoner Tromboemboli				
None	164	7.04±3.98	6 (4-8)	0.577
Var	15	7.67±4.56	6 (5-8)	
Maligenite				
None	129	6.99±4.05	6 (5-7)	0.556
Var	49	7.47±3.93	6 (4-10)	
Enfeksiyon				
None	28	5.64±1.98	5 (4-6)	**0.041**
Var	151	7.36±4.24	6 (5-9)	
İYE				
None	118	7.65±4.50	6 (5-9)	**0.018**
Var	61	6.02±2.59	5 (4-7)	
Pnömoni				
None	135	7.01±3.74	6 (4-8)	0.627
Var	44	7.34±4.80	6 (5-8)	
Aspirasyon Pnömonisi				
None	163	7.13±4.10	6 (4-8)	0.988
Var	16	6.69±3.11	6 (5-8)	
Gastroenterit				
None	169	7.15±4.06	6 (5-8)	0.418
Var	8	6.50±3.50	5 (4-9)	
Sepsis				
None	99	6.43±2.88	5 (4-7)	0.062
Var	80	7.91±4.98	6 (5-9)	
Kolanjit				
None	167	7.15±4.11	6 (4-8)	0.774
Var	12	6.33±2.34	5 (5-8)	
Sellülit				
None	168	7.00±3.89	6 (5-8)	0.848
Var	11	8.55±5.66	5 (4-14)	
Akut Pankreatit				
None	173	7.08±4.05	6 (4-8)	0.425
Var	6	7.50±3.20	7 (4-10)	
SBP				
None	174	6.99±3.93	6 (4-8)	0.071
Var	5	10.80±5.63	12 (5-15.5)	
Other				
None	56	7.77±4.17	6 (5-10)	0.097
Var	123	6.79±3.93	6 (4-7)	

Table 1. A.

Variables	n=179
Age (Year) Mean±Standard Deviation Median (Min-Max)	71.47±15.17 75 (23-95)
Age Group n (%)	
<65	49 (27.4)
≥65	130 (72.6)
Sex n (%)	
Female	90 (50.3)
Male	89 (49.7)

Table 2. Age Distribution According to Patients' Genders

Variable	Regression Coefficient (SE)	OR	95 % CI		p value
Cirrhosis	0.963 (0.436)	2.621	1.115	6.162	**0.027**
Malignancy	0.76 (0.341)	2.141	1.098	4.174	**0.025**
Sepsis	1.133 (0.316)	3.103	1.672	5.760	**<0.001**
Karbapenem	1.278 (0.323)	3.589	1.904	6.764	**<0.001**
Tekoplanin	1.271 (0.331)	3.565	1.863	6.824	**<0.001**
Antifungal	1.232 (0.442)	3.429	1.443	8.146	**0.005**
PİP-TAZO	1.019 (0.315)	2.769	1.495	5.130	**0.001**
Polimiksin	1.360 (0.457)	3.897	1.592	9.542	**0.003**
Transfusion	0.945 (0.337)	2.572	1.329	4.979	**0.005**
dbp	-0.028 (0.013)	1.028	1.003	1.053	**0.025**
Pulse	-0.039 (0.012	1.039	1.016	1.063	**0.001**
ICU Service Catheterization	2.103 (0.630)	8.192	2.382	28.178	**0.001**
Absence of oral nutrition	0.965 (0.313)	2.625	1.422	4.847	**0.002**
TPN	0.789 (0.324)	2.201	1.167	4.153	**0.015**

Table 3. Multivariate Logistic Regression Analysis for Factors Affecting Mortality.

[Abstract:2591]

LEPTOMENINGEAL CARCINOSIS A DISEASE WITH A GENERALLY POOR PROGNOSIS: A COMPARISON OF TWO CLINICAL CASES

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Introduction: The finding of leptomeningeal carcinomatosis is becoming frequent in Internal Medicine departments following the improvement of diagnostic techniques and the increased survival of neoplastic patients. The tumours most frequently associated with it are adenocarcinoma of the breast and lung, melanoma. Regardless of the primary tumour, there is widespread leptomeningeal involvement via cerebrospinal fluid, blood flow, or direct spread with multifocal neurologic symptoms.

Case Description: Two clinical cases of primary breast cancer are described. Case 1: F 61 aa (medical history: arterial hypertension, obstructive sleep apnoea syndrome, diabetes mellitus with peripheral neuropathy, gastroesophageal reflux) is hospitalized for aspiration pneumonia and respiratory failure on oxygen therapy. She has been reporting progressive asthenia for a month with difficult walking, dysphagia, dysarthria, dysphonia. On chest CT: left breast nodule, not known in medical history (adenocarcinoma). Magnetic resonance imaging of the brain: leptomeningeal carcinomatosis. There is a progressive worsening of the respiratory condition which requires orotracheal intubation and transfer to intensive care. Case 2: F 58 years old (medical history: breast cancer subjected to neo-juvant chemotherapy, surgery and radiotherapy) is hospitalized due to the appearance of positional dizziness associated with nausea and vomiting, migraine, hearing loss and visual impairment in the left eye for three months. Magnetic resonance imaging of the brain: leptomeningeal carcinomatosis. Oncological evaluation carried out with indication for palliative therapy.

Conclusions: to date, despite the diagnostic improvement, leptomeningeal carcinomatosis is often associated with a poor prognosis; due to the low performance status of the patients it is often impossible to implement a therapeutic attempt.

Keywords: *leptomeningeal carcinomatosis, performans status, palliative therapy*

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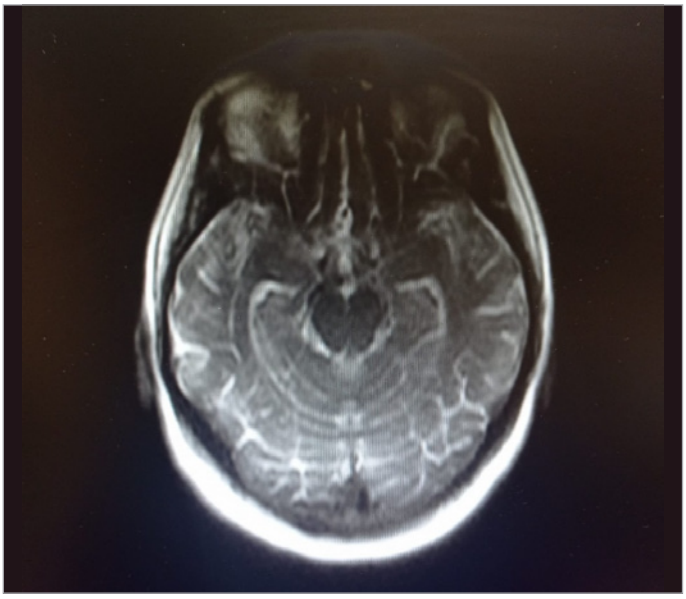

Figure 1. *Brain MRI case 1.*

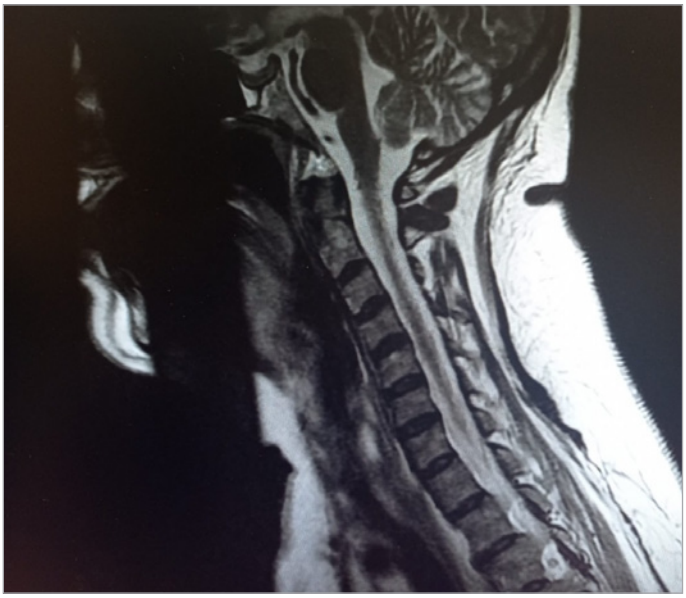

Figure 2. *Cervical MRI case 1.*

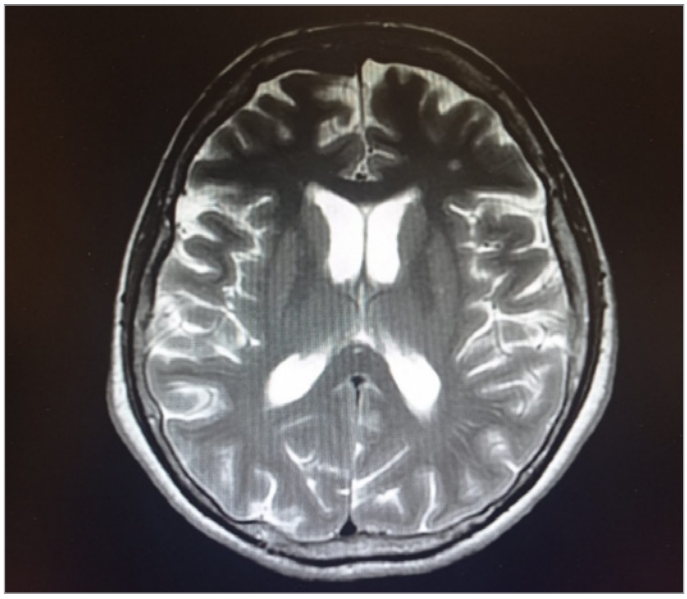

Figure 3. *MRI Brain second case report.*

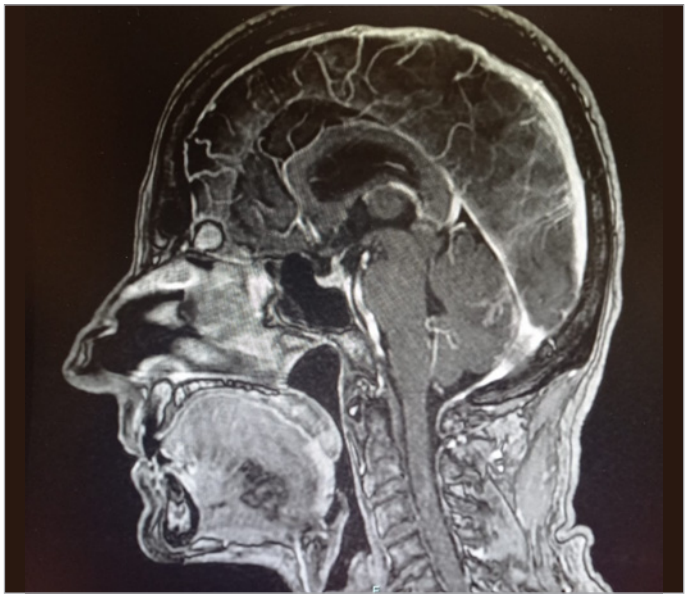

Figure 4. *MRI cervical second case report.*

[Abstract:2599]

CIRRHOSIS, SPLENOMEGALLY AND HYPERSPLENISM, OR NOT?

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A 61-year-old male, a former heavy drinker with a history of chronic liver disease and suspected alcoholic liver cirrhosis, was referred to Internal Medicine for investigation of chronic anaemic syndrome. Splenomegaly was noted during examination, and abdominal imaging (Figure 1) suggested cirrhosis without portal hypertension. Autoimmunity and hepatotropic agent serology were negative. Elevated LDH, immature leukocytes since 2020,

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normocytic anaemia since 2018, and monocytosis since 2012 were observed (Table 1).

Despite cirrhosis suspicion with splenomegaly and hypersplenism as causes of chronic anaemia, the absence of portal hypertension data led to further investigation for a haematological cause. Peripheral blood smear revealed dysplasia, leukoerythroblastic reaction with 2% blasts, suggesting myelofibrosis. A bone marrow biopsy confirmed myelofibrosis with JAK-2 positivity. A diagnosis of intermediate-risk primary myelofibrosis (PMF) with splenomegaly was established, and ruxolitinib treatment initiated. PMF involves chronic myeloproliferative syndrome with bone marrow fibrosis. The final consequence of this process is extramedullary hematopoiesis that usually occurs in the spleen and liver. Various causes of splenomegaly exist (Table 2). PMF is suspected in large splenomegaly with granulocyte precursors, nucleated red blood cells, and dacryocytes in peripheral blood.

In this case, despite the confusing factor of chronic liver disease, attention diverted towards cirrhosis as the cause. A complete study was carried out, arriving at the hypothesis that splenomegaly and liver alterations were probably secondary to extramedullary hematopoiesis.

This case underscores the challenge of differential diagnosis in splenomegaly patients, considering factors like cirrhosis suspicion, which may actually reflect alterations secondary to extramedullary hematopoiesis in myelofibrosis.

Keywords: *primary myelofibrosis, splenomegaly, hepatic cirrhosis*

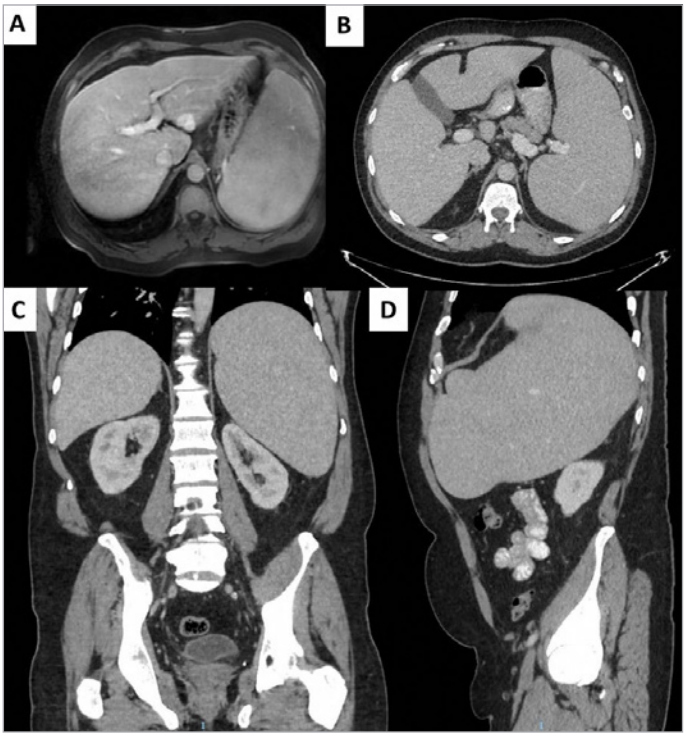

Figure 1. *MRI and CT of the abdomen with contrast.*
A and B: axial sections. C: coronal section. D: sagittal section. Alteration of liver morphology with an increase in the caudate-right lobe index that may suggest early cirrhosis. Splenomegaly with a craniocaudal axis of 26 cm. No venous collaterals or ascites were seen.

	08/08/12	03/11/17	31/08/18	21/01/19	15/02/22	12/09/22	03/05/23
LDH (U/L)					801	756	835
Hb (g/dL)	14.4	13.3	12.8	12	12.8	11.6	11.1
Leukocytes (/µL)	9,400	8,400	9,100	8,500	9,780	10,640	10,660
Platelets (/µL)	203,000	286,000	232,000	224,000	126,000	155,000	182,000
Erythroblasts (%)					2.9	2.6	2.3
Monocytes (%)	19	16.3	17.6	13.6	12.2	12.3	11.4
Immature granulocytes (%)					9.8	10.6	13.1

Table 1. *Analytical evolution.*

Congestive	Malignancy	Infectious	Inflammatory	Infiltrative, nonmalignant	Hematological states (hypersplenic)
• Hepatic cirrhosis • Heart failure • Thrombosis of the portal, hepatic or splenic veins	• Lymphoma, usually indolent variants • Acute and chronic leukaemias • Polycythemia vera • Multiple myeloma • Essential thrombocythemia • Primary myelofibrosis • Primary splenic tumours • Metastatic solid tumours	• Viral: hepatitis, infectious mononucleosis, cytomegalovirus • Bacterial: Salmonella, Brucella, tuberculosis • Parasitic: malaria, schistosomiasis, toxoplasmosis, leishmaniasis • Infectious endocarditis • Fungus	• Sarcoidosis • Serum sickness • Systemic lupus erythematosus • Rheumatoid arthritis (Felty syndrome)	• Gaucher disease • Niemann-Pick disease • Amyloid • Other lysosomal storage diseases • Langerhans cell histiocytosis • Hemophagocytic lymphohistiocytosis • Rosai-Dorfman disease	• Acute and chronic haemolytic anaemias • Sickle cell disease (children) • After use of recombinant human granulocyte colony-stimulating factor

Table 2. *Main causes of splenomegaly.*

[Abstract:2605]

RARE BREAST TUMOURS WITH NEUROENDOCRINE FEATURES AND COMPREHENSIVE REVIEW OF THE LITERATURE

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Objective: The aim of this study was to examine the histopathological characteristics, treatment modalities, survival features, and factors influencing these characteristics in patients with breast neuroendocrine neoplasms (NENs).

Materials and Methods: The files of patients diagnosed with breast NENs who were followed up in Ankara Numune Training and Research Hospital and Ankara City Hospital Medical Oncology clinics between December 2005 and June 2022 were reviewed retrospectively. The clinical and pathological features of the patients were noted in their survival files. The data obtained were analysed and compared.

Results: Nine patients with breast NENs were included in the study at a single centre. Histologically, four patients (55.5%) exhibited a well-differentiated neuroendocrine tumour (NET) and two patients (22.2%) had a poorly differentiated neuroendocrine carcinoma (NEC), while two patients (22.2%) showed an invasive breast carcinoma with neuroendocrine differentiation (IBC-NED). All patients underwent surgery after diagnosis. Among the patients, six (66.7%) received adjuvant chemotherapy, while radiotherapy was administered to five (55.6%). All patients diagnosed with IBC-NED and breast NEC, and two patients

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diagnosed with well-differentiated breast NET received adjuvant chemotherapy. Hormonal therapy was given to all patients. The median overall survival was 10.6 (7.3-13.8) years and the median progression-free survival was 6.2 (1.1-11.3) years.

Conclusions: Understanding the biology of breast NEN is crucial for improving diagnosis, treatment, and patient outcomes. Further research is warranted to elucidate the underlying mechanisms, validate potential therapeutic targets, and establish optimal management strategies for this distinct subtype of breast cancer.

Keywords: *breast neuroendocrine neoplasia, well-differentiated neuroendocrine tumour, breast neuroendocrine carcinoma, invasive breast carcinoma with neuroendocrine differentiation*

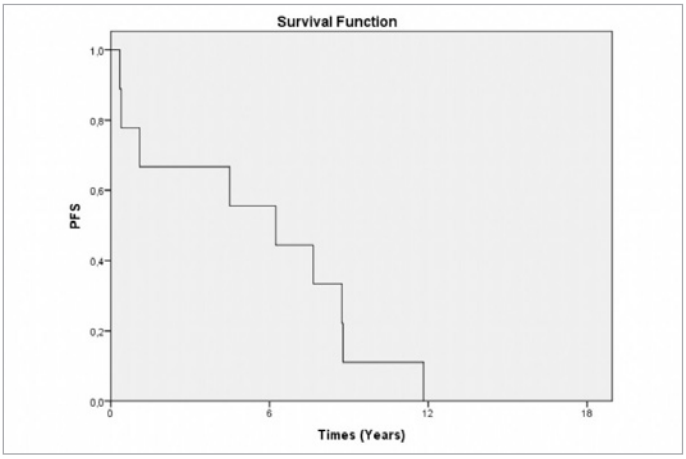

Figure 1. *Kaplan–Meier analysis for PFS of the whole group.*

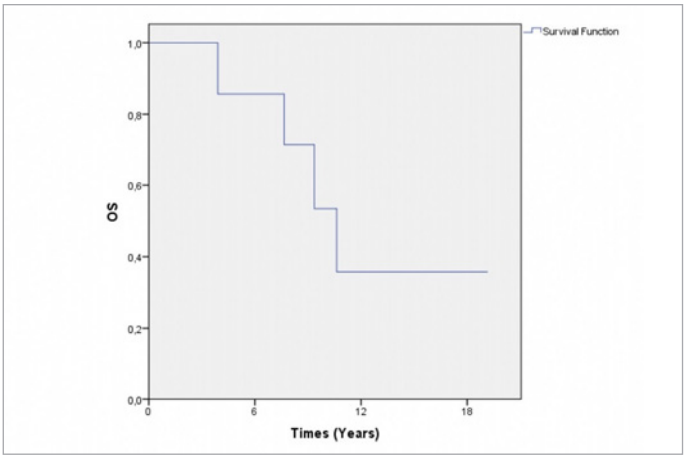

Figure 2. *Kaplan–Meier analysis for OS of the whole group.*

		Well-differentiated NET N (%)	Neuroendocrine carcinoma N (%)	Invasive breast carcinoma with neuroendocrine differentiation N (%)
Age (Years) Median (Minimum-Maximum)		65 (50-81)	52 (48-55)	64 (58-69)
ECOG PS	0	1 (20%)	2 (100%)	0
	1	2 (40%)	0	2 (100%)
	2	1 (20%)	0	0
	3	1 (20%)	0	0
Localization	Right	3 (60%)	2 (100%)	2 (100%)
	Left	2 (40%)	0	0
Operation	Modified radical mastectomy	3 (60%)	2 (100%)	1 (50%)
	Breast-conserving surgery	2 (40%)	0	1 (50%)
Tumour diameter (cm)		17 (13-40)	35.5 (35-36)	41.5 (30-53)
ER	Negative	0	0	0
	Positive	5 (100%)	2 (100%)	2 (100%)
PR	Negative	0	0	0
	Positive	5 (100%)	2 (100%)	2 (100%)
HER2	Negative	5 (100%)	0	2 (100%)
	Positive	0	2 (100%)	0
Chromogranin	Negative	1 (20%)	0	0
	Positive	4 (80%)	1 (50%)	2 (100%)
	Unknown	0	1 (50%)	0
Synaptophysin	Negative	0	0	0
	Positive	5 (100%)	2 (100%)	2 (100%)
Stage	pT2N0M0	1 (20%)	1 (50%)	1 (50%)
	pT3N1M0	1 (20%)	0	0
	pT1N0M0	2 (40%)	0	0
	pT1N1M0	1 (20%)	0	0
	pT2N1M0	0	1 (50%)	1 (50%)

Table 1. *Clinicopathological characteristics of all patients. ECOG PS: Eastern Cooperative Oncology Group Performance Score ER: Estrogen Receptor PR: Progesterone receptor.*

		All groups N (%)
Adjuvant chemotherapy	No	3 (33.3%)
	Yes	6 (66.7%)
Radiotherapy	No	4 (44.4%)
	Yes	5 (55.6%)
Hormonotherapy	Tamoxifen	1 (11.1%)
	Aromatase inhibitors	8 (88.9%)

Table 2. *Adjuvant treatment modality of the whole group.*

[Abstract:2612]

INTEREST OF CEA AND CA19-9 MEASUREMENT IN THE PERITONEAL FLUID

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While tumour markers are routinely dosed in the serum, the usefulness of their dosage in the peritoneal fluid (PF) is still controversial. Our aim was to evaluate the interest of measurement of carcinoembryonic antigen (CEA) and carbohydrate antigen 19-9 (CA 19-9), in PF. Thirty patients with ascites who had CEA and CA19-9 measurement in PF were enrolled. This measurement was done by electrochemiluminescence (Roche®).

Among 30 patients, 4 had elevated CEA (>10 ng/ml) and CA19-9 (>120 U/ml) levels in PF (4 cases of digestive cancers: gastric: 2 cases, pancreas: 1 case, colon: 1 case). In 3 cases, a concomitant dosage in the serum was done; the concentrations were higher in PF than in serum with normal serum values of CEA (<5 ng/ml) and CA19-9 (<37 U/ml) in 1 case. Two other patients (rectum cancer:1 case, ovarian mass:1 case) had elevated CEA levels in PF and serum while CA19-9 levels were normal. In one case of

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bulbar stenosis, only CA19-9 in PF was elevated. CEA and CA19-9 concentrations in PF were respectively <5 ng/ml and <37 U/ml for the remaining 23 patients. No one of them had gastric, pancreas or colorectal cancers. In 5 cases/23, serum values were discordant (CEA>5 ng/ml and/or CA19-9>37 U/ml); these 5 patients had a cirrhosis decompensation. CEA and CA 19-9 measurement in PF may be useful for the diagnosis of digestive cancers (gastric, pancreas, colo-rectal cancers) notably in case of their negativity in the serum. Normal values in PF may also help to better interpret serum false positive results.

Keywords: *tumour markers, carcinoembryonic antigen, carbohydrate antigen 19-9, peritoneal fluid, ascites, digestive cancer*

[Abstract:2644]

BONE MARROW HYPOPLASIA DUE TO IRREGULAR METHOTREXATE TREATMENT FOR PSORIASIS

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MTX is a widely used drug most commonly used in the treatment of various malignancies and autoimmune disorders, including rheumatoid arthritis and elective abortions. It is an inhibitor of cellular proliferation. As a consequence, when a patient's oral epithelial cells are affected, mucositis develops. Via the same mechanism, cytopenia leads to increased bleeding, easily bruising, macrocytic erythrocytes, and an increased risk of infections.

A 66-year-old male patient who has chronic kidney disease, was admitted to the haematology service for further investigation and medical supportive treatment with pancytopenia. Hb: 9.7, plt: 5, wbc: 1.2, neu: 0.5 was measured in the tests performed at an external centre.

On his ENT examination, there were plaques between leukoplakia and pemphigoid involving the oropharynx extensively in terms of neck infection. Parapharyngeal abscess or cellulitis was not considered.

While no haematological malignancy was found in the bone marrow biopsy performed in the patient who discontinued methotrexate treatment and was placed under clinical observation, the intoxication of methotrexate, which was used irregularly due to psoriatic arthritis in the patient whose anamnesis was detailed during the clinical follow-up process, explained the patient's current clinical oral aphthae, pancytopenia and renal dysfunction.

Keywords: *methotrexate, bone marrow, intoxication, intoxication*

[Abstract:2668]

CHOLECYSTECTOMY EXPERIENCE IN FXII DEFICIENCY: CASE REPORT

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Case Description: The patient is a 46-year-old female scheduled for elective cholecystectomy due to recurrent abdominal pain and the presence of gallstones. The hemogram, prothrombin time, kidney and liver function tests are all standard, and she has no chronic diseases. The patient, who is not taking antiplatelet or anticoagulant medications, was referred to the Hematology department after an isolated elevation in activated partial thromboplastin time (aPTT) was detected: 80.5 seconds (23.6-34.8 seconds).

Clinical Hypothesis: The patient showed no signs of bleeding and had been free of any issues throughout her life. This led us to consider the possibility of an isolated factor deficiency.

Diagnostic Pathways: Initially, a 1:1 mixture test was conducted, and it was noted that the aPTT value improved after the first hour. Subsequently, with a provisional diagnosis of coagulation factor deficiency, intrinsic pathway factors reflecting aPTT were examined, revealing an FXII level of 1%. Other factor levels were normal. The patient was diagnosed with isolated FXII deficiency.

Discussion and Learning Points: In FXII deficiency, the aPTT is prolonged because FXII cannot optimally activate FXI in the intrinsic pathway of the coagulation cascade. Nevertheless, as FXI is activated by thrombin produced through the extrinsic pathway, no clinical bleeding is observed; thus, treatment is unnecessary. On the contrary, the deficiency of FXII increases the risk of thrombosis due to its effect on the fibrinolytic system. In these patients, perioperative anticoagulation and thromboprophylaxis positively impact the postoperative clinical course.

Keywords: *Factor XII, coagulation, thrombosis*

[Abstract:2674]

ANOMALIES OF VENOUS DRAINAGE PRESENTING AS A PROXIMAL DEEP VEIN THROMBOSIS

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We present a lady with proximal vein thrombosis whose initial history and exam revealed no obvious triggers for the thrombotic

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event. To evaluate the proximal extent of the thrombus, a computed tomography scan was carried out. This demonstrated an extensive thrombosis involving the external and common iliac veins in the abdomen but significantly revealed an absent inferior vena cava.

This case highlights that congenital anomalies can present for the first time in adulthood. Patients with an unprovoked proximal thromboses, should have further intraabdominal imaging to look for pelvic masses, anatomical anomalies, May Thurner's syndrome. An absent IVC is rare congenital anomaly but is associated with deep vein thromboses and pulmonary embolism. Limited information is available regarding duration of anticoagulation therapy and risk of recurrence.

Vascular access via the femoral veins is to be avoided and is associated with higher risk of vascular injury, line associated thrombosis.

Keywords: *congenital anomalies, venous drainage, proximal DVT*

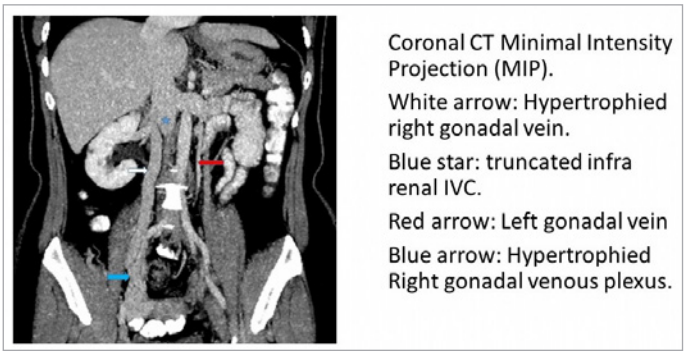

Figure 1. *ABSENT IVC.*

[Abstract:2704]

FATAL CASE OF ALK-NEGATIVE INTRAVASCULAR ANAPLASTIC LARGE T-CELL LYMPHOMA IN A YOUNG ADULT: A RARE CASE PRESENTATION

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Background: Intravascular lymphoma (IVL) is an infrequent malignancy defined as the proliferation of lymphoma cells inside vessels. Mostly, cases are of the B-cell subtype. A few IVL cases are of the Anaplastic T-cell CD30+ subtype, which could be divided into two categories based on the presence and absence of the Anaplastic Lymphoma Kinase gene (ALK gene). ALK negative cases reveal a lower prevalence of stage III-IV disease and extra nodal involvement. We report a fatal case of T-IVL in a young adult.

Case Description: A 33-year-old man with a ten-month history of swollen lymph nodes presented with acute onset of recurrent bloody vomitus and nasal bleeding. Physical examination showed generalized lymphadenopathy (Fig. 1). Laboratory examination revealed pancytopenia with a WBC = 1.7 $\times 10^9$/l, Hb = 7.4 g/dl, platelet count = 25×10^9/l, and elevated serum bilirubin (8.94 mg/dl), findings suggestive of bone marrow and liver involvement. A tru-cut biopsy of lymph node confirmed an alkaline negative large cell lymphoma (LCL) in grade 4B. Histology revealed a neoplasm composed of clusters of large lymphoma cells with horse-shoe nuclei (Hallmark cells). Phenotypic analysis indicated that they were positive for CD3, CD8 and granzyme, while being negative for CD4, CD20, CD30, CD56, and ALK. Despite CHOP (cyclophosphamide, doxorubicin, vincristine, and prednisone) chemotherapy, his condition rapidly deteriorated and he developed multiorgan failure in the next few days. He died ten days after admission.

Conclusions: ALK-negative status in IVL may indicate a worse prognosis. A vigilant approach to diagnosis and treatment is necessary.

Keywords: *intravascular lymphoma, large T cell, ALK, immunohistochemistry*

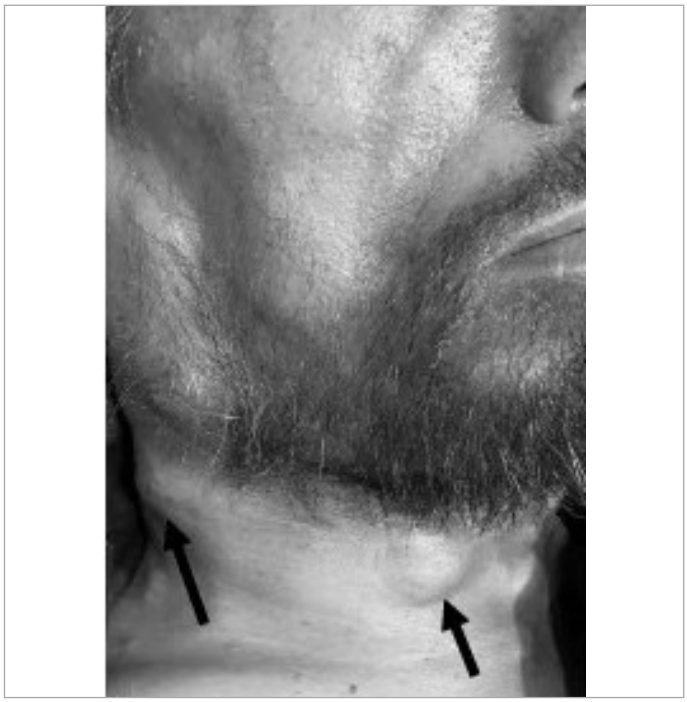

Figure 1. *Swollen cervical and submandibular lymph nodes.*

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[Abstract:2708]

EVANS SYNDROME: A CASE REPORT

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Case Description: A 31-year-old man was admitted to the emergency department because he had petechial lesions on his arms and legs. His blood tests showed low levels of haemoglobin (Hb: 7.1 g/dl) and platelets (Plt: 14000 µL). Additionally, he had elevated levels of indirect bilirubin and LDH in his biochemistry tests, suggesting haemolysis. Further tests revealed a positive result for the direct Coombs test, a 7% reticulocyte count and low haptoglobin. The diagnosis was idiopathic immune thrombocytopenia (ITP) and autoimmune haemolytic anaemia (AIHA). Treatment began with Methylprednisolone at a dose of 1 mg/kg. Two days later, the platelet count rose above 50 thousand. Over the follow-up period, haemolysis decreased, haemoglobin levels increased, and platelet values returned to normal. By the first month of treatment, the direct Coombs test became negative, and corticosteroids were gradually reduced and stopped.

Clinical Hypothesis: The individual diagnosed with immune thrombocytopenia and autoimmune haemolytic anaemia was categorized as having Evans syndrome.

Diagnostic Pathways: Haemolysis parameters were positive. Vitamins, haemoglobin electrophoresis and immunoglobulin levels were all within normal ranges for the patient's age. Tests for viral antibodies, hepatitis markers, antiplatelet antibodies, ANA and AntiDs DNA yielded negative results.

Discussion and Learning Points: Evans syndrome is a clinical condition characterized by the simultaneous occurrence of AIHA and ITP and is often of unknown origin. When considering a diagnosis of Evans syndrome, it is important to rule out autoimmune connective tissue diseases, viral infections, IgA deficiency, acquired immunodeficiency syndrome, common variable immunodeficiency and lymphoproliferative diseases.

Keywords: *Evans syndrome, ITP, haemolysis*

[Abstract:2715]

TIME TO CHOOSE WISELY INTRAVENOUS THERAPY IN IRON DEFICIENCY TREATMENT: A SINGLE-CENTER RETROSPECTIVE STUDY

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Background and Aims: The use of intravenous (IV) iron therapy in the treatment of iron deficiency (ID) is a current hot topic. In this study we examined the IV iron treatment indications and patient-related causes.

Methods: We performed a retrospective single-centre study evaluating the indication of IV iron therapy in the Daily Treatment Unit between May 2 and October 15, 2023. Age, gender, type of iron therapy, comorbid diseases, routine medications, symptoms, history of oral iron therapy, oral iron intolerance and hematologic parameters were recorded.

Results: 265 patients who received IV iron therapy were reviewed. 81.5% were women. The median age was 49 (IQR 37-69), Hb 10.5 (IQR 9.3-11.7 g/dL), TSAT 7% (IQR 4-11), ferritin 6.2 ng/mL (IQR 3.6-12.35). The most used type of iron was ferric carboxymaltose (97.7%). Anaemia was not found in 20% of patients with ID. It was observed that 60% of the patients had no history of oral iron therapy. 39.6% of the patients were not seriously symptomatic.16.2% of female patients had menstrual irregularities. Only 7.5% of the patients had a history of acute or chronic bleeding.

Conclusions: The most striking point in this study is that 60% of the patients had no history of oral iron treatment before IV therapy. Although it is easy to use and provides rapid response, it would be wisely not to choose iv iron as the first step for cost-effective treatment in patients with ID in cases where oral iron is not contraindicated (intolerance-non-response to treatment, active IBD, etc.)

Keywords: *iron deficiency, intravenous iron, choosing wisely*

[Abstract:2722]

THORACIC MASS AND NEPHRITIC SYNDROME IN MONOCLONAL GAMMOPATHY OF RENAL SIGNIFICANCE AND CRYOGLOBULINEMIA

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Purpose: To describe the most relevant features of monoclonal gammopathy of renal significance.

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Methods: Case report.
Findings: 78-year-old woman with a history of hypertension and dyslipidaemia who was admitted for a one-week history of progressive bilateral oedema, elevated blood pressure and dyspnoea on moderate exertion. Laboratory tests showed normocytic anaemia, frank haematuria and haematuria. Chest X-ray showed right paratracheal mass with pleural effusion. Thoracic-abdominal CT showed right hilar adenopathy of 10 mm and slight right pleural effusion. Analytical enlargement: increased RF, C3 and C4 consumption; Anti-CCP, ANAs, antiphospholipid antibodies and anticardiolipin negative. p-ANCA positive (atypical pattern). Serum proteinogram: slight increase of alpha-globulins and hypogammaglobulinemia. Immunofixation: small monoclonal IgM kappa band. Urine proteinogram: normal kappa and lambda chains, positive cryoglobulin type II, monoclonal IgM kappa and polyclonal IgG kappa. Renal biopsy was diagnostic of diffuse proliferative GN with IgM positivity, suggestive of cryoglobulinemia, and the medullary aspirate was compatible with marginal lymphoma. Treatment with antihypertensive, hydroxychloroquine and Rituximab (4 cycles) was started, and the patient evolved satisfactorily.
Conclusions: Monoclonal gammopathy of renal significance (MGRS) is a group of renal pathological processes related to GM. The diagnosis is almost always established by the association of renal involvement and monoclonal peak in the electrophoretic spectrum. Renal biopsy is the diagnostic test par excellence. The hematologic study determines the nature and extent of the causative cell clone. Cryoglobulinemia associated with arthritis/arthralgias, neuropathy, proteinuria, microhematuria, renal failure and hypertension. Treatment should be adapted to the altered clone, renal function and possible extrarenal involvement.

Keywords: *monoclonal gammopathy, cryoglobulinemia, proteinogram*

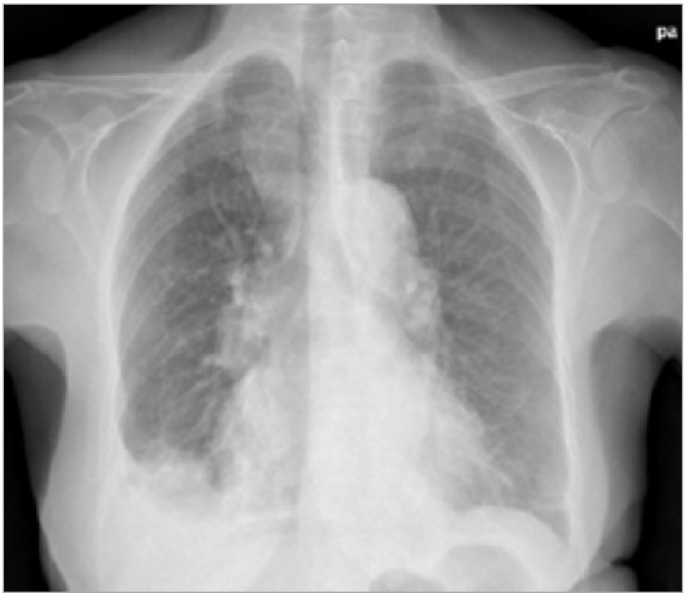

Figure 1.

[Abstract:2723]

CARCINOID SYNDROME AS A CONSTITUTIONAL SYNDROME

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Purpose: To describe the initial presentation of a carcinoid tumour as a constitutional syndrome.
Methods: Case report.
Findings: A 36-year-old woman with no previous pathology had repeatedly visited the Emergency Department in the last month due to asthenia, hyporexia and weight loss of more than 5 kg, associated with epigastralgia, nausea and profuse sweating. She was referred to the Rapid Diagnostic Consultation, where a thoraco-abdominal CT scan was requested, which showed 2 space-occupying hepatic lesions compatible with metastasis. The clinical picture was accompanied by self-limited episodes of facial flushing. An ultrasound-guided core needle biopsy of one of the lesions was performed, with an anatomopathological result of well-differentiated neuroendocrine adenocarcinoma of probable digestive origin. She started treatment with lanreotide, which stabilized the disease, and was referred to specialized surgery for liver metastasectomy.
Conclusions: Asthenia, hyporexia and weight loss are the key triad of constitutional syndrome, suggestive of underlying tumoural pathology. Carcinoid tumours are neuroendocrine tumours located especially in the gastrointestinal tract and bronchi. Their symptomatology depends on the location of the primary tumour and hormonal secretion. Carcinoid syndrome is characterized by facial and truncal flushing, diarrhoea, bronchospasm and dyspnoea; it does not usually present as a constitutional syndrome. It occurs especially in small bowel tumours and in the presence of metastases. Its diagnosis is based on 5-hydroxyindolacetic acid, serotonin and chromogranin A determinations. Localization techniques include computed tomography, magnetic resonance imaging, somatostatin analog scintigraphy and endoscopic techniques. Treatment includes surgery, somatostatin analogues, interferon alpha, ablative therapy, chemotherapy and radiopharmaceuticals.

Keywords: *constitutional syndrome, metastasis, carcinoid syndrome*

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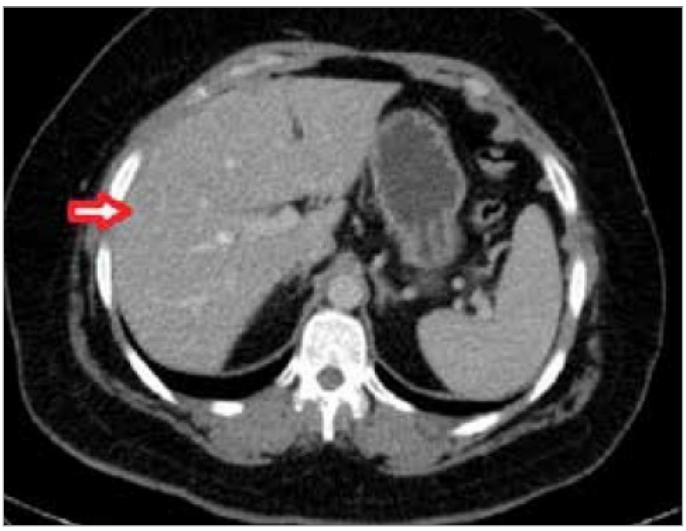

Figure 1.

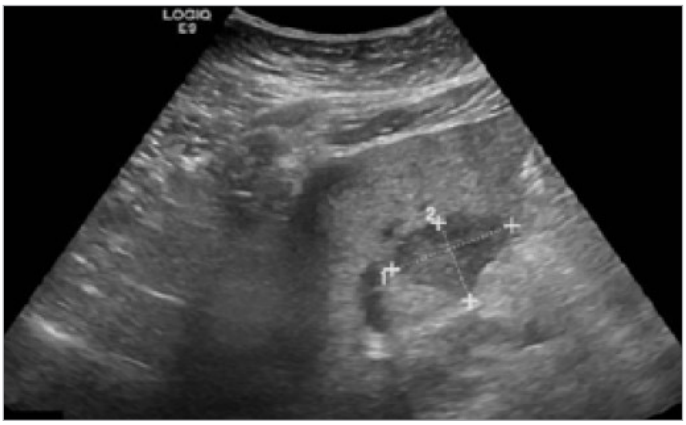

Figure 2.

[Abstract:2742]

A CASE OF CHRONIC LYMPHOCYTIC LEUKAEMIA WITH PROSTATE INVOLVEMENT

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Chronic lymphocytic leukaemia/small lymphocytic lymphoma (CLL/SLL) is an indolent B-cell neoplasm characterized by the progressive accumulation of monoclonal B lymphocytes. While the leukemic form is more prominent in CLL, SLL is characterized by predominant involvement of lymphoid tissue.

In this case, we present a patient diagnosed with CLL/SLL through a prostate biopsy obtained during Transurethral Prostate Resection (TURP) surgery.

A 60-year-old male patient admitted to the urology clinic with complaints of dysuria. Despite medical treatment, his symptoms persisted leading to TURP operation in January 2023 with a preliminary diagnosis of benign prostatic hyperplasia (BPH). Preoperative tests revealed lymphocytosis and thrombocytopenia. Immunohistochemical examination of the prostate biopsy showed widespread staining for CD20, CD5, CD23, and BCL2 in neoplastic cells. Flow cytometry of peripheral blood obtained postoperatively revealed a B-cell population positive for CD5, CD20, CD23 and CD22 constituting 65% of the total. The patient was diagnosed with CLL/SLL based on peripheral blood flow cytometry and prostate biopsy results. Regarding his thrombocytopenia and symptomatic prostatic involvement venetoclax/obinituzumab treatment was initiated.

CLL/SLL typically affects the blood, bone marrow, and secondary lymphoid tissues (liver and spleen). Rare sites of involvement include the skin, breast and meninges. Literature review indicates that prostate involvement is exceptionally rare, with only a single case reported. Asymptomatic cases can be observed without treatment for years. Depending on the molecular characteristics of the disease and the performance status of the patient, different treatment options are available in the first line management and for relapsed/resistant disease. CLL/SLL should be considered in cases of extranodal disease, particularly when there is evidence of lymphocytosis indicative of bone marrow involvement.

Keywords: *chronic lymphocytic leukaemia, prostate cancer, venetoclax*

[Abstract:2754]

CASE OF ALVEOLAR HEMORRHAGE ACCOMPANYING ATYPICAL HAEMOLYTIC UREMIC SYNDROME

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Purpose: Atypical haemolytic uremic syndrome (aHUS) is a thrombotic microangiopathy (TMA) through the alternative complement activation. The etiology can be attributed to autoimmune diseases, malignancies or medications. The aim of this report is emphasizing a case of chemotherapy-associated aHUS complicated by alveolar haemorrhage (AH).

Case Description: A 45-year-old male patient, who had metastatic testicular mixed germ cell tumour, was presented with peeling of skin (Figure 1) and sensory neuropathic symptoms after receiving second cycle of bleomycin, etoposide, cisplatin chemotherapies. Laboratory tests revealed refractory pancytopenia, non-oliguric acute kidney injury, haemolytic anaemia with normal coagulation parameters. Peripheral blood smear showed fragmented erythrocytes (Figure 2) and the patient underwent to plasma

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exchange. The ADAMTS-13 enzyme level and PNH FLAER were normal. Anti-GBM antibody and ANCA tests were negative. Renal biopsy revealed TMA findings. Eculizumab, anti-C5 monoclonal antibody, was initiated with diagnosis of aHUS following the essential vaccinations. Exertional dyspnoea and acute phase progression developed during the patient's follow-up. Imagining findings was consistent with massive alveolar haemorrhage (Figure 3) despite the absence of thrombocytopenia. Mechanical ventilation was initiated still the patient was lost on the 14th day in the intensive care unit due to hypoxic respiratory failure even though pulse steroid, plasmapheresis, and haemodialysis.

Conclusions: AH is an infrequent complication in aHUS however all reported cases in the literature have resulted with exitus. Out of 38 disclosed HUS cases with AH, 21 were adults and diagnosis was made as post-mortem in seven patients. Prompt recognition and early aggressive treatment are crucial but management can still be challenging.

Keywords: *atypical haemolytic uremic syndrome, alveolar hemorrhage, eculizumab*

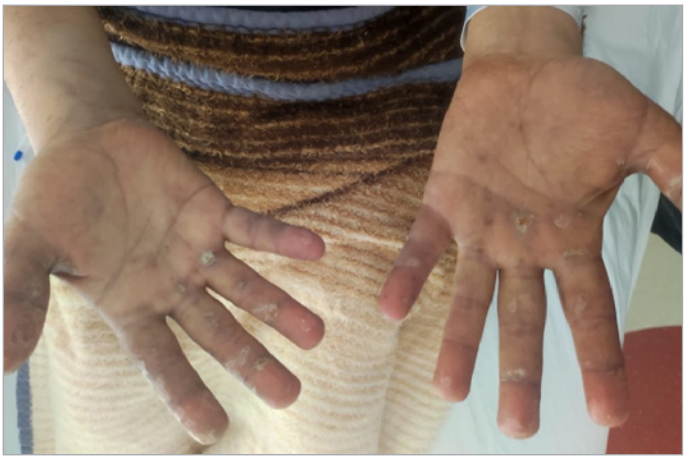

Figure 1. *Peeling of the skin.*

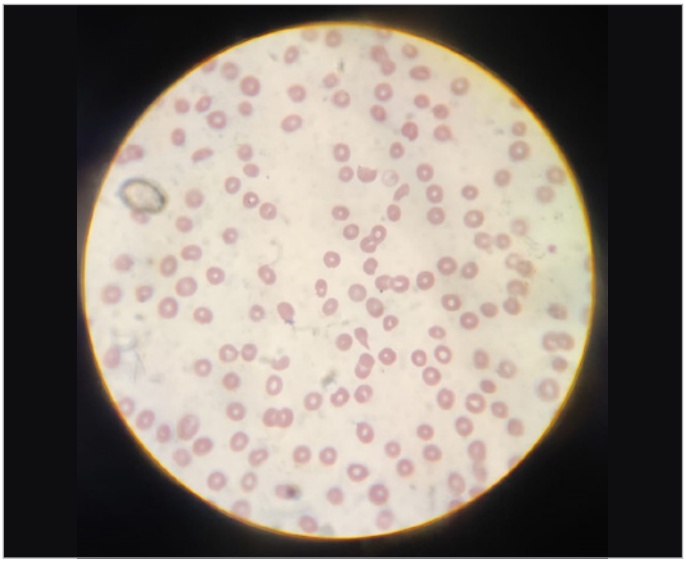

Figure 2. *Fragmented red blood cells.*

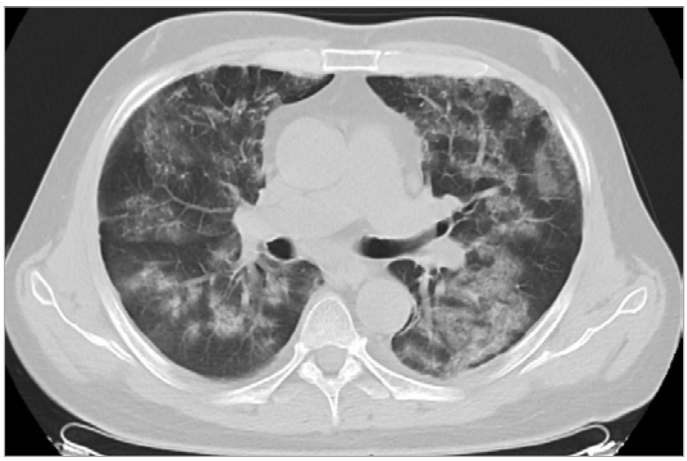

Figure 3. *Cross-sectional view of thorax CT. Alveolar hemorrhage.*

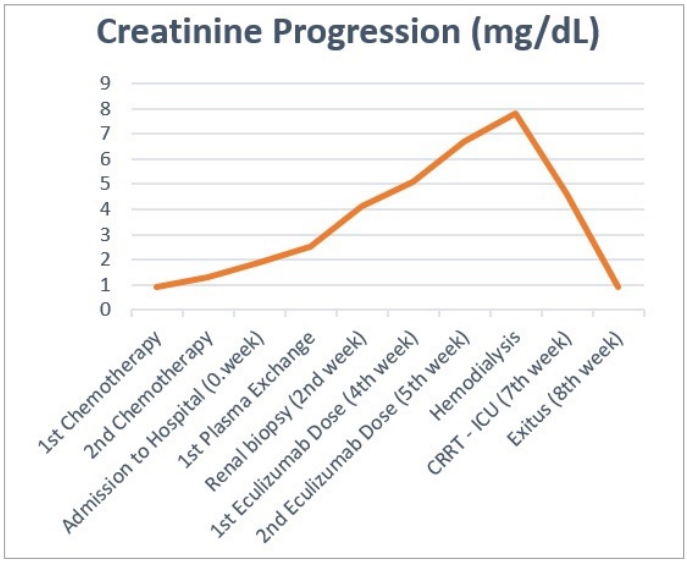

Figure 4. *Line chart of creatinine progress.*

[Abstract:2756]

ANAEMIA OF CHRONIC DISEASE, WHAT IS ITS PROFILE?

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Introduction: The second most prevalent type of anaemia in the world is anaemia of chronic disease (ACD) which is seen in a variety of conditions. This study aims to know the profile of ACD and its correlation with the different inflammation proteins.

Methods: The single-centre retrospective study analyses the records of hospitalizations in the period 2018-2021 including patients with ACD.

Results: We included 163 patients, i.e. a prevalence of 12.21%, average age is 52.4 ± 1.5 years 95% CL [49.4-55.4], and an M/F sex ratio of 1.08. The main symptoms are asthenia (71.8%), pallor

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(55.8%), and dyspnoea on exertion (49.1%). The rate, degree of anaemia, and percentage of anisocytosis according to the different chronic diseases are presented in Table 1. In univariate and multivariate analysis, we did not observe a significant correlation between the hemoglobulin level and the proteins of inflammation. Discussion. The ACD which refers to mild to moderately severe anaemias (haemoglobin: 7–12), diabetes, and hypertension are the most marked consistent with several publications. Red blood cell distribution width (RDW) has been recognized as a valuable prognostic indicator in various cardiovascular conditions, reported as normal in ACD, in our series is greater than 16% (anisocytosis) in 20-65%. The newer name, anaemia of inflammation is not only more reflective of the pathophysiology of ACD.

Conclusions: ACD is common and its diagnosis should prompt a search for an underlying systemic disorder if one is not evident. Many parameters are useful notably RDW which remains a promoter marker.

Keywords: *anaemia, chronic disease, RDW, inflammation*

Chronic Disease	Prevalence	95% CL	10<Hb<12-13 (g/dl)	7<Hb<10 (g/dl)	Hb<7 (g/dl)	Anisocytosis RDW > 16%
Hypertension	33.7%	[26.8-41.2]	34.5%	43.6%	21.8%	47.5%
Diabetes	36.8%	[29.7-44.4]	36.7%	46.7%	16.7%	45.2%
Heart Disease	8.00%	[4.5-12.9]	30.8%	30.8%	38.5%	33.3%
CKD	12.90%	[8.4-18.7]	28.6%	57.1%	14.3%	44.4%
Cirrhosis	5.50%	[2.8-9.8]	11.1%	66.7%	22.2%	20.0%
Chronic Infection	7.40%	[4.1-12.1]	50.0%	41.7%	8.3%	63.6%
Cancer	11.70%	[7.4-17.2]	42.1%	52.6%	5.3%	64.7%
Hypothyroidism	14.70%	[9.9-20.8]	29.2%	58.3%	12.5%	53.8%
Autoimmune Disease	19.00%	[13.6-25.6]	45.2%	48.4%	6.5%	37.5%
IBD	8.60%	[5.0-13.6]	28.6%	57.1%	14.3%	42.9%

Table 1. *Prevalence, anaemia level, and anisocytosis percentage of ACD in different conditions. Hb: Haemoglobin; RDW: Red blood cell distribution width; CKD: Chronic Kidney Disease; IBD: Inflammatory Bowel Disease.*

[Abstract:2761]

AN UNCOMMON CASE OF ATYPICAL HAEMOLYTIC UREMIC SYNDROME IN A CERVIX CANCER PATIENT

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Introduction: Atypical haemolytic uremic syndrome (aHUS) is an uncommon condition that is infrequently associated with cancer. In the literature, there is no report of the co-existence of aHUS and cervix cancer.

Case Presentation: A 51-year-old woman presented with oedema and decreased urine output. Her haemoglobin was 9.7 g/dl, platelet count was 77 K/µL, creatinine was 5.18 mg/dL, LDH was 408 IU/L. In peripheral blood smear 3-4 schistocytes had been detected. We diagnosed MAHA and started plasma exchange therapy (PEX). ADAMTS activity was 91.29% and 0.91 IU/ml. She was diagnosed with aHUS with the absence of diarrhoea, and negative stool test results. She experienced vaginal bleeding during PEX. A cervical biopsy was performed. After PEX sessions, the patient's platelet count decreased, and her creatinine levels increased. The patient was accepted as refractory to PEX, and eculizumab treatment was administered. In spite of eculizumab, her urine output decreased and creatinine levels increased to 6.5 mg/dl. She required hemodialysis. Her MRI showed grade three pelvicaliectasis and tortuous ureters. After bilateral double-j stent placement, her renal functions improved, and dialysis treatments were discontinued. She has been diagnosed with stage 3 cervical cancer. The patient is cured after chemo-radiotherapy and eculizumab infusions.

Discussion: Reported cases of malignancy with aHUS are mostly adenocarcinomas. There is no report of co-existing cervix cancer with aHUS/TMA. The challenge of this case was the necessity of eculizumab treatment. But before eculizumab treatment, her platelet count was also dropped. Therefore, we confirmed our diagnosis of aHUS and continued our eculizumab treatment.

Keywords: *aHUS, cervix cancer, eculizumab, plasma exchange, thrombotic microangiopathy*

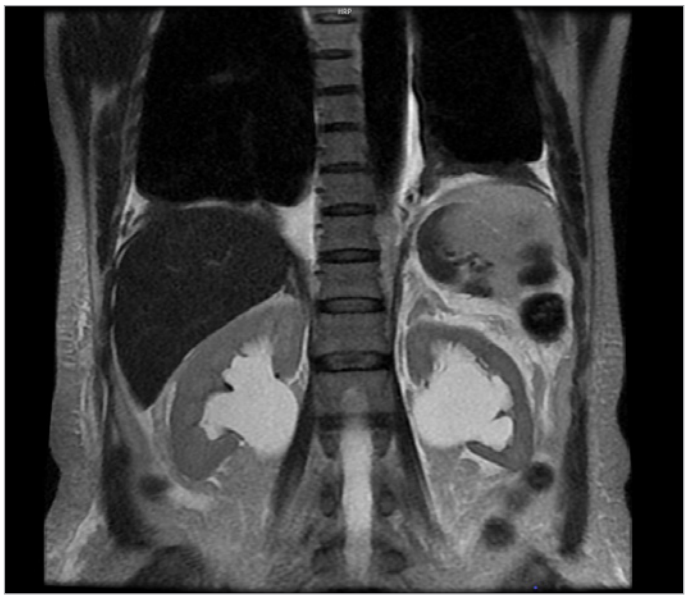

Figure 1. *Abdominal MR image of pelvicaliectasis. Detection of pelvicaliectasis changed the course of diagnosis and treatment.*

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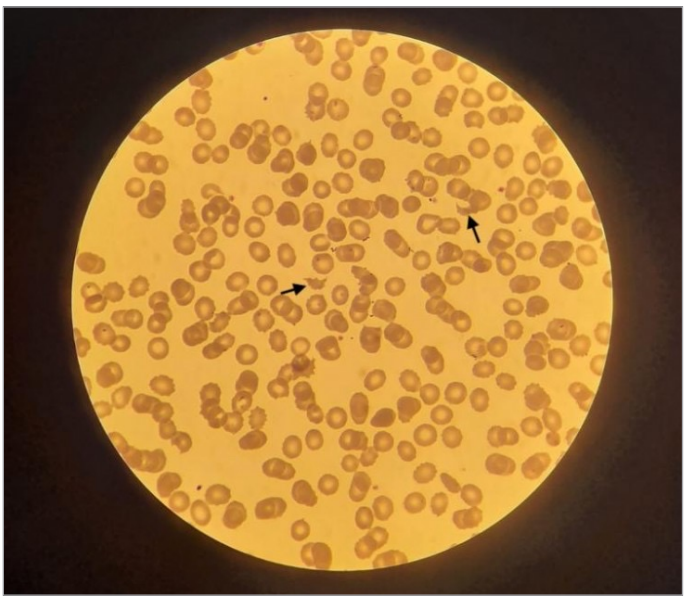

Figure 2. Peripheral blood smear.
In peripheral blood smear 3-4 schistocytes had been detected.

[Abstract:2763]

RARE AND IMPORTANT CAUSE OF CHANGE IN BOWEL HABITS

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Introduction: Diffuse large B-cell lymphoma (DLBCL) accounts for 30-50% of all non-Hodgkin lymphomas which is described as aggressive. Only 5% of extranodal involvements of DLBCL is in the intestines. Small intestine involvement is more common than rectum and colon involvement.

Case Presentation: A 57-year-old woman with diagnosis of type-2 diabetes mellitus and asthma, complaining of an involuntary loss of weight of 8 kilos in the last 6 months and a change in bowel habits, applied to the emergency department with severe diffuse abdominal pain and nausea. On physical examination, a hard mass observed by deep palpatio in the right lower quadrant. Abdominal CT showed diffuse wall thickening in the ascending colon and cecum wall, marked dilation compatible with ileus in the distal ileal loops, and a tubular structure with a diameter reaching approximately 15 mm in the right lower quadrant adjacent to the cecum. After performing colonoscopy, patient was taken under operation with right hemicolectomy, partial duodenal resection, and duodenostomy. The pathology result was DLBCL of germinal centre origin (c-myc -, bcl2, and bcl6 negative). The patient was transferred to haematology department. After receiving the 1st cycle of R-CHOP (rituximab, cyclophosphamide, doxorubicin, vincristine, prednisone), almost a complete response was observed in the control PET-CT. The patient's 2nd course of chemotherapy was planned.

Discussion: Change in bowel habits should always remain as an important clue in our minds. Although simpler gastropathies may arise, malignancies should not be overlooked. In this case, we shared a case of DLBCL with a rare presentation.

Keywords: *bowel habits, diffuse large B-cell lymphoma, colon cancer*

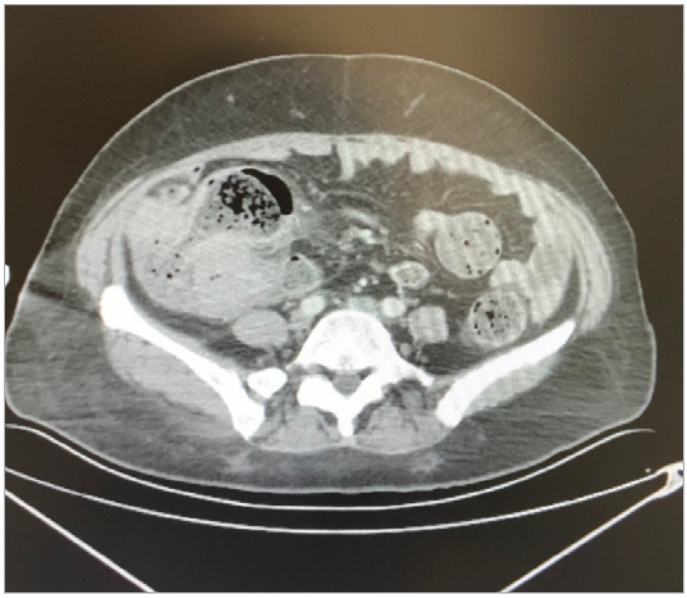

Figure 1.

[Abstract:2774]

RADIOLOGICAL-CLINICAL PROGRESSION

Ángela Crespo Rubio, Saray Suárez García, Alicia Romero Calvo, Pablo Ortiz De Urbina Fernández, Lara Calvo Rubio, Marina Pintor Rey, María Isabel Muinelo Voces, María Esther Fernández Pérez

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Introduction: Woman 75 years, consults for pain in hemithorax and left flank, with mechanical characteristics, occasionally burning, accompanied grade III/IV dyspnoea and general syndrome with loss of 12 kg in 6 months. On physical examination, vesicular murmur was preserved with left pleural effusion (PD) semiology. Analytically creatinine 1.56 mg/dL, CDK-EPI 32 mL/min/1.73 m2. The x-ray of thorax, increase in left PD and multiple opacities nodular. Diagnostic thoracentesis previous with pH 7.25 compatible with transudate, negative for microbiology and cytology.

Results: Our patient showed signs of a general syndrome accompanied by rapid radiological progression. It's done CT thoraco-abdomino-pelvic suggestive of malignant pleural mesothelioma in left hemithorax, bilateral mediastinal lymphadenopathy, cortical erosion of the posterolateral arch of the 9th rib and infiltration of the pericardium with pericardial effusion mild-moderate. Pleuro-pulmonary ultrasound-guided core needle biopsy is performed with finding of circumferential left pleural thickening with a profile immunohistochemistry compatible with mesothelioma (calretinin, WT1 positive) (BEREP4 and MOC31

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negative). Assessed by Oncology, complete study with bone scan showing bone metastasis in C7, echocardiogram with effusion moderate pericardial mass, anfractuous precardiac mass and masses adhered to pericardium and new CT with progression of pleural mesothelioma. Palliative line begins with Carboplatin-Pemetrexed with unfavourable evolution.

Discussion: Malignant pleural mesothelioma is an aggressive tumour originating from serous surfaces. The literature emphasizes the need for early diagnosis to reduce the morbi-mortality of a neoplasia which in itself registers a high mortality rate.

Bibliography

Porcel JM. Pleural mesothelioma. Med Clin (Barc). 2022 Sep 9;159(5):240-247. English, Spanish. doi: 10.1016/j.medcli.2022.03.007.

Keywords: *general syndrome, pain, dyspnea, malignant pleural effusion, mesothelioma*

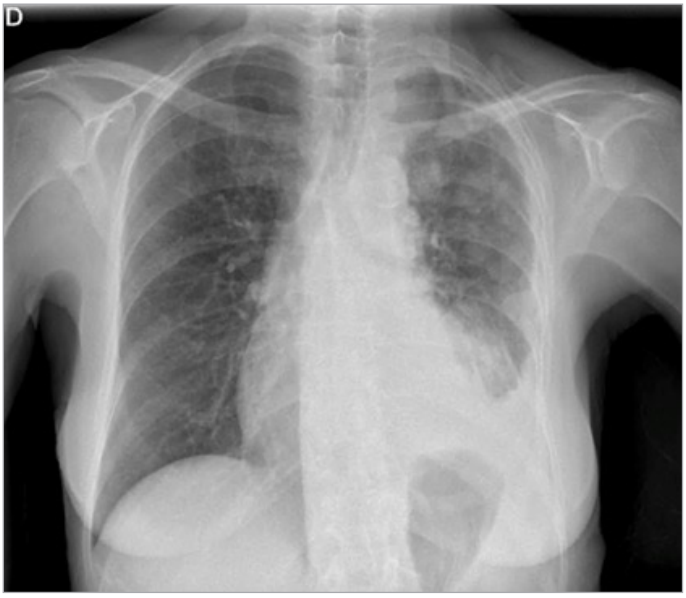

Figure 1. *Chest Radiology. Pleural effusion and nodular opacities left hemithorax.*

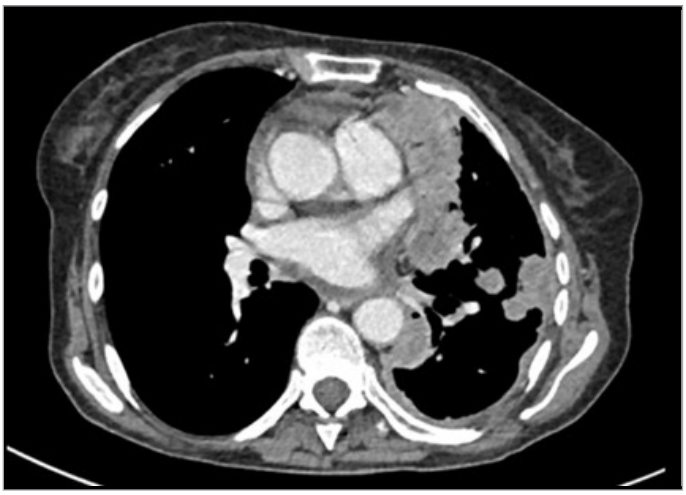

Figure 2. *TC. Suggestive of malignant pleural mesothelioma.*

⚠ *The authors did not provide Figure 3 upon requests from the event organizer.*

[Abstract:2796]

MULTIDISCIPLINARY TEAM MEETINGS DEDICATED TO THE MANAGEMENT OF IMMUNE-RELATED TOXICITIES ASSOCIATED WITH IMMUNE CHECKPOINTS INHIBITORS IN CLINICAL PRACTICE: ONE-YEAR EXPERIENCE IN A SINGLE CENTER IN NORTHEASTERN FRANCE

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The incidence and severity of the immune-related adverse events (irAEs) tend to increase with new combination therapeutic strategies in oncology. Thus, these toxicities require specific management, including guidance from multidisciplinary team of specialists.

The ImmunoLor team was set up in 2022 at the University Hospital of Nancy (France). Once per month we discuss the case-by-case management of patients presenting with irAEs. We investigated the first year of our activities of this multidisciplinary team of oncologists, organ specialists and pharmacists.

Over study period, 23 requests were submitted to the ImmunoLor team with a majority of melanoma. The primary purpose of these requests was to confirm and to manage irAEs. Subsequent discussion included considerations for re-challenge of immunotherapy. Most common irAEs discussed were pneumonitis (n = 5), neurotoxicity (n = 5), and endocrine toxicity (n = 4) and 21 of all irAEs (91%) were grade ≥ 3. The average time to onset was 3.5 months, a similar result from previous study (Rivet et al, 2021). Multi-immune-related toxicity of grade ≥3 irAEs occurred in 9 patients (43%) underlying the complexity of the situations. For the treatment of irAEs, systemic steroids were used in 52% of cases. Forty seven percent of patients who experienced ≥ 3 grade irAEs were rechallenged.

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This study underlines the medical needs in the management of severe irAE (grade ≥3), multi-immune-related toxicity and for re-challenge. This single centre experience allowed us to develop a new coordinated strategy to face this clinical challenge for a proper diagnosis and management of irAEs.

Keywords: *multidisciplinary collaborative approach, immune-related adverse event, immune checkpoint inhibitor*

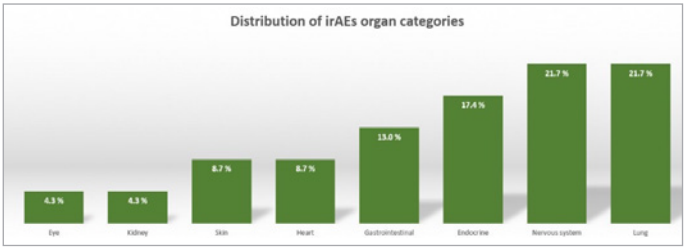

Figure 1. *Distribution of irAEs organ categories.*

Characteristics of the patients	n
Age (years)	65
Male	17
Female	6
Tumor types	
Melanoma	13
Renal cell cancer	6
Lung cancer	2
Spinocellular carcinoma	1
Papillary adenocarcinoma	1
Immune check-point inhibitor	
Nivolumab	4
Nivolumab/Ipilimumab	10
Pembrolizumab	7
Durvalumab	2

Table 1. *Clinical characteristics of the patients.*

Adverse event		Number of events (%)	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Skin disorders			-	-	-	-	-
	Bullous pemphigoid	1 (4.3 %)	-	-	1 (4.3 %)	-	-
	Toxidermia	1 (4.3 %)	-	-	1 (4.3 %)	-	-
Endocrine			-	-		-	-
	Hypophysitis	1 (4.3 %)	-	-	1 (4.3 %)	-	-
	Diabetes	2 (8.7 %)	-	-	-	2 (8.7 %)	-
	Hyperthyroidism	1 (4.3 %)	-	-	1 (4.3 %)	-	-
Respiratory disorders			-	-		-	-
	Pneumonitis	5 (21.7 %)	-	-	4 (13 %)	1 (4.3 %)	-
Cardiovascular disorders			-	-	-	-	-
	Myocarditis	2 (8.7 %)	-	-	-	1 (4.3 %)	1 (4.3 %)
Gastrointestinal disorders			-	-	-	-	-
	Pancreatitis	1 (4.3 %)	-	-	1 (4.3 %)	-	-
	Colitis	2 (8.7 %)	-	-	1 (4.3 %)	1 (4.3 %)	-
Kidney failure			-	-	-	-	-
	Nephritis	1 (4.3 %)	-	-	-	1 (4.3 %)	-
Nervous system disorders			-	-	-	-	-
	Audio vestibular Toxicity	1 (4.3 %)	1 (4.3 %)	-	-	-	-
	Polyneuropathy	2 (8.7 %)	-	-	1 (4.3 %)	1 (4.3 %)	-
	Guillain–Barré syndrome	1 (4.3 %)	-	-	-	1 (4.3 %)	-
	Myelitis	1 (4.3 %)	-	-	1 (4.3 %)	-	-
Eye disorders			-	-	-	-	-
	Anterior uveitis	1 (4.3 %)	-	1 (4.3 %)	-	-	-

Table 2. *Overview of the reported adverse events.*

[Abstract:2863]

A UNUSUAL CASE OF METASTATIC UROTHELIAL CARCINOMA PRESENTED WITH DIABETES INSIPITUS AND HYPOPHYSEAL METASTASIS

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Urothelial carcinoma (UC) is the most common type of bladder cancer, accounting for about 90% of all cases. Brain metastases to the sellar and parasellar regions are uncommon and typically result from lung or breast malignancy. Hypophyseal metastasis is a rare complication of UC, occurring in only about 1% of cases. When cancer spreads to the pituitary gland, it can disrupt the production of these hormones, leading to a variety of symptoms such as headache, vomiting, fatigue, retroorbital pain, and diabetes insipidus (DI). There is no cure for hypophyseal metastasis. Herein, we report a case of metastatic UC presented with DI and hypophyseal metastasis.

The patient, a 52-year-old male, complained of weight loss, polydipsia, polyuria, and dizziness that had persisted for two months. Assessment of the patient: urine density 1.006, osmolality < 300. Pituitary MRI with contrast revealed that the neurohypophysis was in its normal position but had lost T1 brightness and increased in size (8 x 6 mm). Due to the mass effect, it pushed the diffusely thickened stalk and adenohypophysis forwarded; it was bulging upwards. Metastasis in the neurohypophysis and stalk was considered. After the evaluation of the patient's central pituitary hormones, synchronous findings of central hypothyroidism, hypocortizolism and hypogonadotropic hypogonadism were detected. In this context, a synacthen test was performed, and an insufficient cortisol response was observed. Central hypothyroidism was diagnosed. The presence of central diabetes insipidus, central hypocortisolism, central hypogonadism, and central hypothyroidism in the patient suggested central pituitary metastasis-related panhypopituitarism.

Keywords: *urothelial carcinoma, hypogonadotropic hypogonadism, hypophyseal metastasis*

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[Abstract:2865]

MASKED POLYCYTHEMIA VERA: A CASE REPORT

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Case Description: A 58-year-old male patient from an external centre has been referred to the hematology clinic due to a splenomegaly (18 cm) detected on a CT scan. No other problems were found in the patient other than fatigue, headache and hair loss. Laboratory results showed haemoglobin (Hb) at 10, mean corpuscular volume (MCV) at 60, red blood cell count (RBC) at 7500000, iron at 23, and total iron binding capacity at 420. When comparing with the patient's previous tests from two years ago, Hb was 17, MCV was 85, and RBC was 7000000. It was initially suspected that the patient had polycythemia vera (PV), but this condition was masked due to the development of iron deficiency. A *JAK-2* gene mutation test came back positive. The patient was started on Hydroxyurea for PV. There was concern that the splenomegaly might be due to myelofibrosis, so a bone marrow biopsy was planned.

Clinical Hypothesis: The initial diagnosis was PV, but it was also determined that the patient had iron deficiency anaemia.

Diagnostic Pathways: The previous high levels of Hb and RBC, along with the positive JAK-2 gene mutation, supported the diagnosis of PV. However, the current low levels of Hb, MCV, iron, and the high total iron binding capacity indicated iron deficiency anaemia.

Discussion and Learning Points: PV is a chronic, clonal, and progressive myeloproliferative disease. However, PV can coexist with conditions causing low Hb. Iron deficiency, especially in elderly men, should be taken into consideration in terms of possible malignancies.

Keywords: *polycythemia vera*, *anaemia*, *splenomegaly*

[Abstract:2868]

A CASE OF PLASMA CELL LEUKAEMIA PRESENTING WITH HYPERVISCOSITY SYMPTOMS

Khumara Rzayeva[1], *Muzeyyen Yilmazoglu*[1], *Derya Demirtas*[1], *Tulin Tugluler*[1]

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

In this case, we planned to present a patient who was diagnosed with plasma cell leukaemia while being examined in the emergency department with hyperviscosity symptoms caught by detailed anamnesis. A 70-year-old female patient presented to the emergency department with complaints of headache, deafness in the ears, dizziness, which had been present for 1 year and intensified in the last 2 weeks. In the laboratory tests of the patient, who had complaints of 15 weight loss in 1 year, sweating enough to change 1 athlete at night, albumin: 2.9 g/dL, total protein: 13.4 g/dL. Because of hyperviscosity and B symptoms, the patient was interned to be examined for malignancy. Peripheral blood showed 18.000 plasma cells/dl, serum protein electrophoresis showed M peak: 72.5g/l, serum free kappa: 219 mg/L in serum protein electrophoresis, IgG - kappa monoclonal band was detected in serum immunofixation electrophoresis. 90% of aspiration smears in bone marrow biopsy were plasma cells, 35% of the cells were medium-sized, some of them were CD38+/CD138+ with plasmoblastic morphology including nucleolus. The patient was diagnosed with plasma cell neoplasia showing Kappa monotype. International staging system (ISS): Stage III, Durie-Salmon: Stage IIIA, bortezomib, lenalidomide, dexamethasone treatment was started. The patient is currently being followed regularly from the outpatient clinic and his treatment continues. Our aim in presenting this case is to emphasize the importance of physical examination and anamnesis in clinical diagnosis and to point out that hematologic malignancies such as plasma cell leukaemia may present with hyperviscosity symptoms.

Keywords: *hyperviscosity*, *plasma cell leukaemia*, *hematologic malignancies*

[Abstract:2876]

PERIRENAL TISSUE: AN ATYPICAL ETIOLOGY

Iker Villanueva[1], *Markel Fuentes*[1], *Ibai Lopez*[1], *Eneko Belmonte*[1], *Enrique Garcia Tome*[1], *Naiara Pereña*[1], *Martin Aznal*[1], *Paloma Ibarrondo*[2], *Maria Fatima Mendoza*[1]

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A 58-year-old male with a history of overweight and hepatic steatosis, recently diagnosed with myelodysplasic syndrome (refractory cytopenia of intermediate-low risk). An abdominal ultrasound in follow-up revealed an indeterminate right perirenal collection/tissue. A subsequent CT scan identified bilateral perirenal soft tissue (up to 52 x 48 x 12 mm), predominantly on the right side, with increased metabolic activity (SUVmax 4.8) on a PET-CT.

Due to challenging percutaneous access, an exploratory laparoscopy with surgical biopsy was performed. The pathological anatomy revealed a proliferation of histiocytic cells growing diffusely, with focal granular eosinophilic cytoplasm, round/kidney-shaped nuclei occasionally exhibiting punctate nucleoli, and frequent emperipolesis; consistent with Rosai-Dorfman Disease (RDD).

 DOI: 10.12890/2024_V11Sup1

Despite being asymptomatic after 6 months, a follow-up PET-TC indicated persistent active perirenal tissue on the right (SUVmax 5), prompting close monitoring without initiating treatment.
This case illustrates Rosai-Dorfman Disease, a rare non-Langerhans cell histiocytosis associated with autoimmune conditions and neoplasms, including haematological disorders. A literature case has linked it to myelodysplasic syndrome. RDD's clinical spectrum varies, and diagnosis relies on pathological findings, notably emperipolesis. Treatment lacks clear guidelines, urging individualized approaches. Asymptomatic cases may undergo active surveillance, as spontaneous remission occurs in 20-50% of instances.

Keywords: *non-Langerhans cell histiocytosis, Rosai-Dorfman disease, emperipolesis, perirenal tissue*

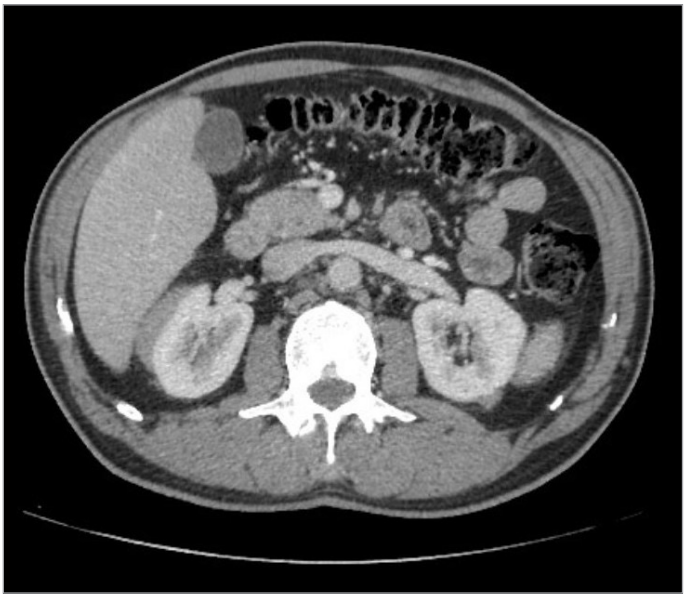

Figure 1. *Perirenal tissue adjacent to right kidney on abdominal CT.*

[Abstract:2877]

RARE PRESENTATION OF PRODROMAL/PRE-B-CELL ACUTE LYMPHOBLASTIC LEUKAEMIA IN A CASE WITH PANCYTOPENIA AND ALTERED CONSCIOUSNESS: CASE REPORT

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Introduction: The pre-leukemic phase is characterized by pancytopenia and is often confused with aplastic anaemia during the initial presentation of these cases.
Case Presentation: The patient presented to the emergency department with a complaint of shortness of breath and altered consciousness persisting for two weeks. The medical history revealed past syphilis and aripiprazole use due to mood disorders. Initial investigations showed haemoglobin:4.7 gb/dL, MCV: 104 fL, WBC: 600/µL, Neu: 200/µL, platelet: 99,000/µL, and CRP: 105 mL. Initial cranial imaging did not reveal acute pathology. The patient has experienced significant weight loss, night sweats, and weakness in the last year. The patient has no lymphadenopathy, no hepatosplenomegaly, Further investigations for pancytopenia showed nutritional tests are normal, corrected reticulocyte: 4.2%, Coombs tests are positive, and LDH: 370 uL/L. A peripheral smear has no significant findings. Aripiprazole was changed to haloperidol. For persistent cytopenias and deepening anaemia, a provisional diagnosis of autoimmune haemolytic anaemia was made, and methylprednisolone was started. Simultaneously, in the patient with ongoing disorientation, neurological events were investigated. No significant findings were detected in cranial imaging. Cerebrospinal fluid analysis is normal. On the 21st day of hospitalization, LDH increased from 196 to 6361 U/L, WBC rose from 2800 to 38000/µL, and the anaemia worsened. A repeat peripheral smear revealed 60% blast cells, leading to a bone marrow biopsy. With the diagnosis of B-ALL, the patient was transferred to the haematology service.
Conclusions: In patients presenting with pancytopenia, even though it is rare in adults, the prodromal phase of acute lymphoblastic leukaemia should be considered and included in our differential diagnoses.

Keywords: *pancytopenia, prodromal ALL, B-ALL*

[Abstract:2884]

EVALUATION OF THE EFFICIENCY AND TOXICITY OF TYROSINE KINASE INHIBITORS IN METASTATIC NON SMALL CELL LUNG CANCER PATIENTS

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In this study, patients with NSCLC who're followed up by the Medical Oncology Unit of Dicle University between 30.05.2013-31.11.2022, who received TKI and who continued their follow-up regularly in our centre. The mean age of the patients were 58.10±14.61 years. 40.3% of the patients were male and 59.7% were female. The rates of smoking and non-smoking of the patients were 35.5% and 59.7%, respectively. There was no statistically significant difference between the driver mutation rates according to the smoking habits of the patients. 67.7% of the patients started to receive TKI in first line, 27.4% in second line and 4.8% in third line. The median OS time of the anti-EGFR group was 17.8 months in those administered at one step and 29.6 months in those administered in two steps. As a result of Kaplan Meier survival analysis, a significant difference was found between these two groups in terms of survival curves (p=0.039). It was determined that the OS rate of the patients who received two-step anti-EGFR was higher than those who received one-step anti-EGFR. The mean follow-up period of all patients was 18 months, and the median OS was 18.7 months.

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In our study, the PFS and OS values of TKIs were found to be in agreement with the literature. Common side effects in our study were fatigue, diarrhoea and anaemia. Few patients needed dose reduction and no toxic death was observed. These data are important in terms of showing that TKIs were a more tolerable and suitable option for patients with fewer side effects while increasing survival.

Keywords: *non-small cell lung cancer, tyrosine kinase inhibitors, survival, toxicity, side effect*

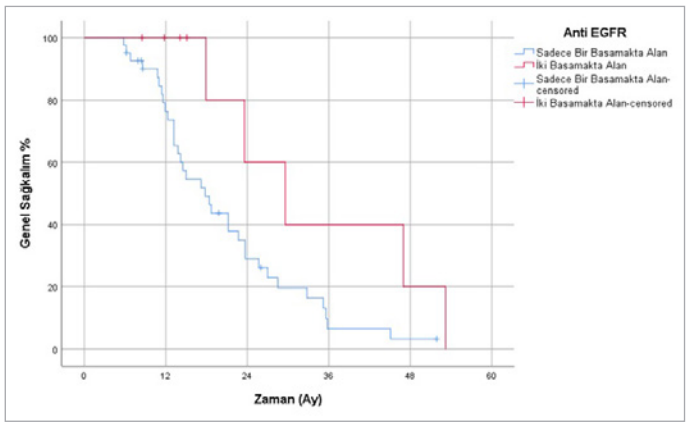

Figure 1. *As a result of Kaplan Meier survival analysis, a significant difference was found between these two groups in terms of survival curves (p=0.039). It was determined that the OS rate of the patients who received two-step anti-EGFR was higher than those.*

[Abstract:2900]

PUTTING PIECES TOGETHER TO REACH THE DIAGNOSIS

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A 66-year-old man, allergic to penicillin, with a history of metabolic syndrome, chronic ischemic heart disease and aortic stenosis, is being studied for oppressive chest pain at rest without coronary lesions and decompensated heart failure with preserved ejection fraction in anasarca, anaemia, renal failure of unknown aetiology (creatinine 2.34 mg/dL) and L5 vertebral body fracture.

After multiple tests, AL amyloidosis was diagnosed by bone marrow puncture. The study is expanded, highlighting amyloid deposit in the parenchyma and arterioles in the renal biopsy.

Treatment began with daratumumab, bortezomib, cyclophosphamide and dexamethasone, with poor tolerance and worsening of symptoms, presenting multiple intercurrent infections and continuous decompensation of heart failure. Finally, the patient ends up dying.

Amyloidosis is an entity characterized by extracellular amyloid protein deposition, which can be both systemic and localized.

An early etiological diagnosis is important to assess the therapy required, as soon as possible. It is established through kappa and lambda light chains, but the biopsy of the affected organ provides the definitive diagnosis. In the case of primary amyloidosis or AL, the treatment of choice is based on chemotherapy, adding hematopoietic cell transplantation if necessary.

The evolution is marked mainly by heart failure, with multiple added comorbidities (chronic kidney disease, gastrointestinal alterations, alterations in cardiac conductivity, infections, etc.). Its mortality is high.

Keywords: *heart, renal, biopsy*

[Abstract:2929]

AZACITIDINE INDUCED PYODERMA GANGRENOSUM

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Pyoderma gangrenosum is a neutrophilic dermatosis frequently associated with an underlying disease, such as arthritis, inflammatory bowel diseases, diabetes mellitus or hematologic disorders such as myelodysplastic syndrome or leukaemia. Diagnosis is based on exclusion of other diagnostic possibilities and skin biopsy.

In this case, we described a 58-year-old patient who developed pyoderma gangrenosum with a diagnosis of chronic myelomonocytic leukaemia and was treated with maintenance subcutaneous azacitidine after allogeneic stem cell transplantation. After the 6th cycle of treatment she was admitted with fever and abdominal pain. The fever was refractory to broad-spectrum antibiotics. On physical examination, she had a large pustular erythematous ulcer, peripheral erythema and tenderness at the abdominal injection site. Skin biopsy of the ulcer margin showed a neutrophilic infiltrate, unfortunately reported to be consistent with pyoderma gangrenosum. She was treated with methylprednisolone 1 mg/kg and regular dressings. After 3 months, the patient's skin ulcer was completely healed and treatment was changed to parenteral decitabine.

To our knowledge, this is one of the rare reported cases of an AML patient developing pyoderma gangrenosum on azacitidine treatment. pyoderma gangrenosum in AML is very rare and can easily be misdiagnosed as an infectious disease. Azacitidine is widely used in MDS/AML/KMML and clinicians should be aware of the cutaneous side effects to avoid recurrence of pyoderma gangrenosum.

Keywords: *azacitidine, pyoderma gangrenosum, MDS, KMML, AML*

 DOI: 10.12890/2024_V11Sup1

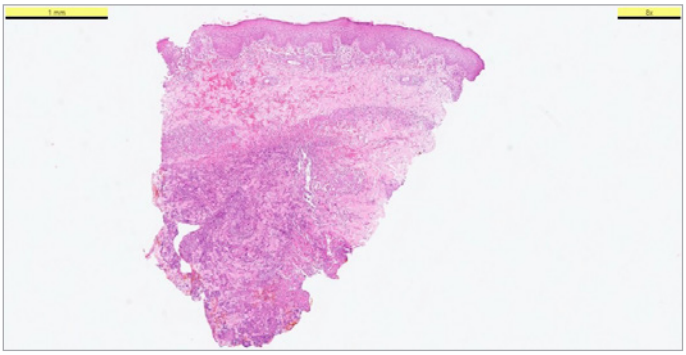

Figure 1. Skin punch biopsy.

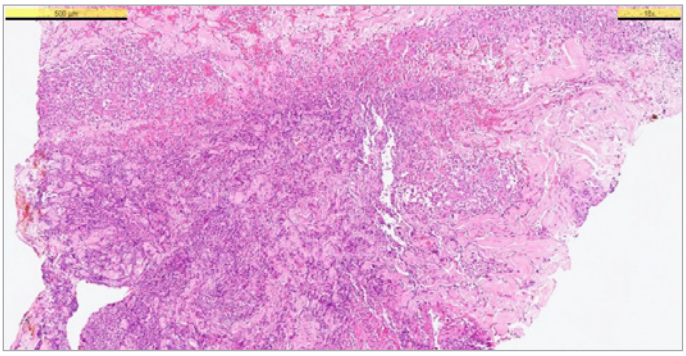

Figure 2. Skin punch biopsy.

[Abstract:2939]

FALSE-NEGATIVE PET/CT SCAN WITH METASTATIC SEBACEOUS CARCINOMA: AN IMPORTANT DIAGNOSTIC CONSIDERATION

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Case Description: An 88-year-old woman with a history of rheumatoid arthritis and osteoporosis presented with persistent neck pain. Initial imaging revealed inflammatory oedema and swelling, prompting a referral to oncology. A PET/CT scan showed no evidence of malignancy. Despite continued pain, subsequent biopsy revealed metastatic sebaceous carcinoma.

Clinical Hypothesis: The clinical hypothesis revolved around the neck pain, initially attributed to inflammatory causes. Oncological consideration was prompted by imaging abnormalities, challenging the assumption that the pain was unrelated to malignancy.

Diagnostic Pathways: Diagnostic pathways included cervical spine radiography, MRI of the neck, PET/CT scan, and a subsequent biopsy. While the PET/CT scan initially showed no malignancy, the biopsy confirmed metastatic sebaceous carcinoma, leading to further investigations such as an MRI of the brain.

Discussion and Learning Points: Sebaceous carcinoma, a rare and aggressive skin cancer, presented challenges in diagnosis due to its atypical manifestations and slow growth. The case highlights the importance of maintaining awareness of unusual cancer presentations. The discussion emphasizes the limitations of PET scans, particularly in detecting slow-growing tumours with lower fluorodeoxyglucose (FDG) uptake. Learning points include the diverse clinical and histological features of sebaceous carcinoma and the necessity for considering alternative diagnostic approaches when initial imaging results are inconclusive. This case underscores the complexity of diagnosing rare malignancies and the need for a comprehensive and multidisciplinary approach in challenging cases.

Keywords: *false-negative PET/CT, sebaceous carcinoma, rare cancer, diagnostic limitations, multidisciplinary approach*

[Abstract:2950]

MULTICENTRIC IDIOPATHIC CASTLEMAN DISEASE: A RARE FINDING

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[2] Clinic Hematology, Centro Hospitalar Universitário de Santo António, Porto, Portugal

Case Description: A 57-year-old woman, with medical history of psoriatic arthritis, chronically medicated with methotrexate, salazopyrine and etanercept, presents to the emergency department with involuntary weight loss (>10%), an increased abdominal perimeter and nocturnal hyperhidrosis, for 6 months. At admission, she was febrile, had a large volume ascites; left sided pleural effusion and non-painful, elastic axillary and inguinal adenopathy.

Clinical Hypothesis: Due to clinical aspects and based on local prevalence, initial high suspicion of inflammatory diseases: oncologic (lymphoproliferative diseases) or infectious (mycobacteria infection) pathologies.

Diagnostic Pathways: Diagnostic paracentesis was compatible with chylous ascites. Blood analysis revealed anaemia and increased systemic inflammatory parameters. Thoraco abdominopelvic CT scan revealed extensive pathological lymph nodes and hepatosplenomegaly. Lymph node surgical excision was performed with histopathology analysis suggesting Castleman disease, with negative human herpesvirus-8. Exclusion criteria were met after thorough investigation. Diagnosis of multicentric idiopathic Castleman disease was established, meeting severe disease criteria[1]. Thus, corticosteroid therapy and tocilizumab were initiated with clinical, analytical and imagiologic improvement.

Discussion and Conclusions: Multicentric idiopathic Castleman is a rare disorder. Clinical suspicion and histopathologic results are essential to establish this diagnosis, after excluding similar diseases. In severe cases, therapeutic options are limited, with worsen prognosis. Immunosuppression was rapidly initiated in this patient, with optimal response[2].

DOI: 10.12890/2024_V11Sup1

References:
1: Zhang, Xuanye et al. "Clinical characteristics and outcomes of Castleman disease: A multicenter study of 185 Chinese patients." Cancer science vol. 109,1 (2018): 199-206. doi:10.1111/cas.13439
2: Wang, Wei, and L Jeffrey Medeiros. "Castleman Disease." Surgical pathology clinics vol. 12,3 (2019): 849-863. doi:10.1016/j.path.2019.03.003

Keywords: *Castleman, idiopathic, multicentric*

[Abstract:2955]

SUBACUTE NEUROLOGICAL IMPAIRMENT AND SEIZURES

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80-year-old man from Peru, with a personal history of hypertension, consulted for epileptic seizures and fever. On examination he presented somnolence with bradypsychia and dysarthria. Several complementary tests were requested: laboratory tests, urine sediment, chest X-ray and computerised tomography of the skull, all of which were normal. Given the patient's drowsiness and the presence of fever, it was decided to perform a lumbar puncture, obtaining cerebrospinal fluid (CSF) with the presence of hyperproteinorrachia. The microbiological study for viruses and bacteria was negative. In addition, an electroencephalogram was performed with bioelectrical brain activity in slowed wakefulness. Finally, he was admitted in Internal Medicine for further investigation. During the anamnesis, his daughter reported subacute neurological deterioration for at least a month, ataxic gait and dysarthria. On the hospital ward, several differential diagnoses were put forward, including the possibility of encephalitis of viral, prion, Peruvian endemic micro-organisms or autoimmune origin and, less likely, cerebral vasculitis or demyelinating disease.
Numerous complementary tests were requested, all of which were normal except for the presence of an elevated prostate-specific antigen (PSA), positive anti-neuronal anti-Yo antibodies in the blood and a electroneurogram suggestive of a distal sensory-motor axonal polyneuropathy.
It was then decided to perform a new lumbar puncture, in which the CSF also tested positive for anti-Yo antibodies. With this finding, an active search for neoplasia was initiated, which led to the diagnosis of prostate adenocarcinoma. Thus, the final diagnosis was paraneoplastic encephalitis due to anti-Yo antibodies. After treatment with immunoglobulins he presented a partial improvement.

Keywords: *encephalitis, epileptic seizure, anti-Yo antibodies, paraneoplastic syndrome*

[Abstract:2965]

EARLY DIAGNOSIS OF PROLONGED LOW-GRADE FEVER THANKS TO ACCESS TO INTEGRATED ULTRASOUND IN THE CONSULTATION ROOM

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Internal Medicine, Hopistal Universitario Puerta del Mar, Cadiz, Spain

Summary: 60-year-old woman with no history of interest. For 4 months she presented fever, constitutional syndrome, cough, chest tightness, palpitations and dyspnoea on exertion. She was diagnosed with pharyngitis. Due to worsening symptoms, she was referred to Internal Medicine. On examination she was in good general condition, with no lymphadenopathies, rhythmic cardiac auscultation and no murmurs, hypoventilation in lung bases. An integrated ultrasound scan was performed showing a discrete bilateral pleural effusion with B lines. We performed an echocardioscopy. A large intracardiac mass occupying the entire left atrium was observed. Cardiology completed the study with a transthoracic echocardiography where our findings were confirmed (hyperechogenic, heterogeneous and pedunculated left atrial mass of 6x3 cm depending on the septum).
The differential diagnosis was atrial myxoma versus intracavitary thrombus. In relation to the clinical presentation and the echocardiographic characteristics, myxoma finally emerged as the main diagnostic. She finally had the tumour excised by Cardiovascular Surgery. The anatomopathological result was Atrial Myxoma.
Discussion: Myxoma is the most common benign cardiac tumour (1). Its main differential diagnosis is with intracardiac thrombus, vegetations and metastases of neoplasms (2). The interest of this case lies in the paucisymptomatic form of presentation together with the importance of having an ultrasound scanner in the consulting room, which can help to avoid diagnostic delays.

References:
1. Aiello VD, de Campos FPF. Cardiac Myxoma. Autops Case Rep. 2016; 6(2): 5-7
2. Aguirre HD, Posada-López AF, Fajardo LC, Castrillón-Velilla DM4. Mixoma atrial: más que una neoplasia benigna. Rev CES Med. 2015; 29(2): 305-312

Keywords: *prolonged fever, integrated ultrasound, intracardiac mass*

 DOI: 10.12890/2024_V11Sup1

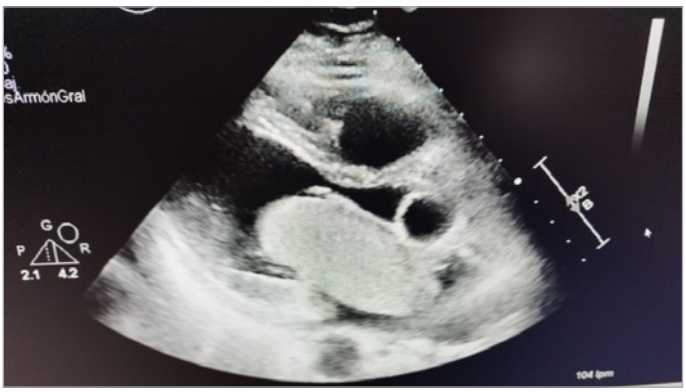
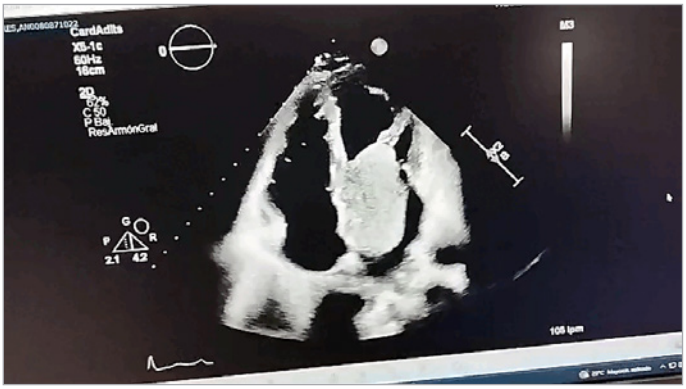


Figure 1. *Echocardioscopy.*
Large intracardiac mass occupying the entire left atrium.



Video 1. *Echocardioscopy video. Large intracardiac mass occupying the entire left atrium moving from atrial to ventricle.*
https://youtu.be/-nnbmb7U3r4

[Abstract:2986]

FROM ADENOPATHY TO DIAGNOSTIC CERTAINTY BY MEANS OF IMMUNOHISTOCHEMISTRY- MALIGNANT MELANOMA VS. LYMPHOMA

Alina Doina Nicoara[1], *Elena Belciug Grigore*[2], *Oana Bianca Milea*[1], *Oana Laura Coiciu*[1], *Cristina Cioti*[1], *Anca Belu*[1]

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Immunohistochemistry (IHC) stands out as an important method in routine diagnostic work which involves the process of selectively identifying antigens in the cells of a tissue section by exploiting the principle of antibodies that bind specifically to antigens within biological tissues. In this presentation, we aim at highlighting the importance of immunohistochemistry from the viewpoint of clinical medical practice.
We present the case of a 78-year-old patient who came to the emergency unit complaining of dysphagia, dysphonia, dyspnoea and left laterocervical adenopathy, as well as significant weight loss. Clinical examination highlights a firm, painless enlarged lymph nodes, mobile with superjacent layers, immobile with the subjacent layers, of approximately 5-3 cm; bilateral axillary adenopathy of approximately 1-1.5 cm, ascites. Biological: leukopenia, biological inflammatory syndrome. CT cervical region: laterocervical adenopathy. The suspicion of Lymphoma is raised and investigations are continued with laterocervical lymph node biopsy and chest - abdomen - pelvis CT for diagnosis and staging.
The CT shows: LSS pulmonary nodule with possible secondary substrate, multiple laterocervical, mediastinal, bilateral axillary, abdominal-pelvic adenopathies, peritoneal nodular formations and ascites fluid. From the histopathological point of view, specific changes are described for non-Hodgkin's lymphoma, but it is recommended to complete the investigations with IHC. Immunohistochemical profile of malignant melanoma is detected. During a thorough examination, a plantar lesion with a specific appearance is observed, unnoticed by the patient,
• IHC is the key to the diagnostic certainty of this case where the clinical examination and the histopathological examination both suggested that the diagnosis was malignant lymphoma.

Keywords: *Immunohistochemistry, adenopathies, malignant melanoma*

[Abstract:3026]

UNCOMMON CAUSE OF LYMPHOCYTOSIS: LYMPHOCYTOSIS SECONDARY TO LITHIUM USAGE

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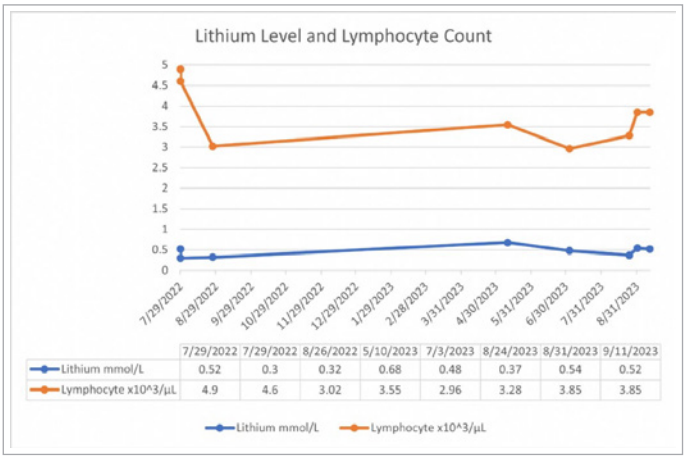
[2] Hacettepe Universitesi Tip Fakultesi Hematoloji Bilim Dali, Ankara, Turkey

Lithium, which is widely used in mood disorders, has several side effects. Lymphocytosis is a rare side effect. The patient was a young man in his twenties. He was consulted because of the increased leukocyte count. After evaluation, a correlation was found between lithium blood level and lymphocyte count. The diagnosis of lymphocytosis secondary to lithium intake can only be made with the elimination of other possible causes of lymphocytosis. CLL (chronic lymphocytic leukaemia) is a disease of old age, but there are reports that it can occur in younger patients. Therefore, possible viral infections, possible drug interactions, possible systemic diseases and malignancies were evaluated and eliminated. All patients should be systemically and thoroughly evaluated. All possible causes should be eliminated by minimally invasive and cost-effective methods.

Keywords: *lithium, lymphocytosis, CLL*

 DOI: 10.12890/2024_V11Sup1



	7/29/2022	7/29/2022	8/26/2022	5/10/2023	7/3/2023	8/24/2023	8/31/2023	9/11/2023
Lithium mmol/L	0.52	0.3	0.32	0.68	0.48	0.37	0.54	0.52
Lymphocyte x10^3/µL	4.9	4.6	3.02	3.55	2.96	3.28	3.85	3.85

Figure 1. Lithium levels and lymphocyte counts.

[Abstract:3065]

ECCRINE POROCARCINOMA OF THE BREAST SKIN WITH DISTANT METASTASIS: A RARE CASE REPORT

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Purpose: We aimed to present an 83-year-old female patient with eccrine porocarcinoma in our clinic.

Findings: An 83-year-old female patient has had a painless, non-draining skin lesion on her left breast for years and has not been followed up. Upon the development of a new lesion with discharge and bleeding on the lesion, a doctor was consulted and the excisional biopsy performed was reported as eccrine porocarcinoma. After the operation, painful lymphadenopathy developed in the left cervical and axillary regions. PET/CT showed cervical and axillary lymph node involvement and lung parenchyma involvement. Due to low performance score, chemotherapy was not planned; palliative radiotherapy was planned. In order to evaluate the possibility of hormonal therapy, ER, PR and her-2-neu were additionally requested from the pathologist, but the results were negative. The patient is followed with palliative radiotherapy.

Conclusions: Eccrine porocarcinoma, or malignant eccrine poroma, is a malignant tumour originating from the eccrine glands, accounting for 0.005% of all skin cancers. Lymph node metastasis and distant metastasis are rare. In our case, there was distant metastasis at the time of admission. It seems difficult to say whether the patient's skin lesion, which has been present for years and has not progressed, was a malignant eccrine poroma from the very beginning, or whether the patient developed a malignant eccrine poroma on the basis of a benign eccrine poroma. Although the hormone treatment option seems promising since the disease is an advanced age disease, hormone positivity is not common, as in our case.

Keywords: *eccrine porocarcinoma, malignant eccrine poroma, skin cancers*

[Abstract:3066]

THROMBOSIS FREQUENCY AND RISK FACTORS IN PATIENTS DIAGNOSED WITH MULTIPLE MYELOMA

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University of Health Sciences, Gulhane Faculty of Medicine & Gulhane Training and Research Hospital, Ankara, Turkey

Multiple Myeloma (MM), a plasma cell neoplasm, significantly elevates the risk of thrombosis, with a ninefold increase in venous thromboembolism (VTE) compared to other malignancies. This study, conducted at the Gulhane Training and Research Hospital Hematology Clinic from November 2016 to December 2022, aims to assess thrombosis frequency and aetiology in MM patients, develop a suitable scoring system for thrombosis risk, and establish a thromboprophylaxis program for high-risk individuals. Retrospective data from patients diagnosed with multiple myeloma during the specified period were obtained by reviewing medical records. A total of 113 patients were included, with 16.8% developing thrombosis during follow-up. Notably, the calcium values at diagnosis were significantly higher in the group without thrombosis. Treatment analysis revealed a significant association between high-dose dexamethasone use (≥480 mg/month) and thrombosis development. In the thrombosis-affected group, immunomodulatory agents were the second most commonly used, highlighting their role as a thrombosis risk factor. Additionally, IMPEDE VTE scores at diagnosis were significantly higher in the thrombosis group. In conclusion, this study establishes a significant link between high-dose dexamethasone usage and thrombosis in MM patients. The lower calcium values in the thrombosis group, despite being within the normal range, present an intriguing finding warranting further investigation.

Keywords: *multiple myeloma, venous thromboembolism, calcium, IMiD, dexamethasone*

[Abstract:3067]

A CASE REPORT, SEVERE HYPOMAGNESEMIA AS INITIAL PRESENTATION OF PANCREATIC ADENOCARCINOMA

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In this study, we present a case involving a 68-year-old female patient with a medical history of hypertension, diabetes mellitus, and coronary artery disease. The patient was admitted to the emergency department due to bloody vomiting following an elective endoscopy-colonoscopy procedure, with subsequent gastroscopy revealing pangastritis. Physical examination showed signs of dehydration. Laboratory findings indicated electrolyte imbalance, specifically sodium (141 mmol/L), potassium (2.9 mmol/L), calcium (6.71 mg/dL), and critically low magnesium

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(0.36 mg/dL). The patient received IV replacement therapy, initially attributing hypomagnesemia to phosphosoda used during colonoscopy preparation. Despite ongoing IV and oral magnesium supplementation, persistent hypomagnesemia prompted further investigation, ruling out renal losses. Absence of gastrointestinal symptoms, additional clinical signs, and normal ECG led to abdominal imaging, revealing a complex cystic lesion at the pancreatic head compressing the pancreatic duct and common bile duct in MRI. Endoscopic ultrasound-guided biopsy confirmed the diagnosis of pancreatic adenocarcinoma.

This case underscores the potential for hypomagnesemia to be an early manifestation of pancreatic adenocarcinoma, either as a treatment-related effect or due to progressive loss of pancreatic function. The absence of typical risk factors for hypomagnesemia necessitates consideration of malignancies, particularly pancreatic adenocarcinoma, in cases of refractory hypomagnesemia. Early recognition of such atypical presentations is crucial for timely intervention and comprehensive differential diagnosis, potentially improving patient outcomes in similar clinical scenarios.

Keywords: *adenocarninoma, refractory hypomagnesemia, pancreatic carcinoma*

[Abstract:3071]

MYELOMATOUS MENINGITIS: A CASE PRESENTATION

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Multiple myeloma is a malignant haematological disease characterized by monoclonal immunoglobulin increase. While central nervous system involvement in MM is rare (1%), the detection of myelomatous meningitis without solitary lesions on imaging is even rarer. Here, we present a case with the development of myelomatous meningitis during follow-up.

In 2016, a 45-year-old female patient, who presented with complaints of lower back pain to our outpatient clinic, was diagnosed with multiple myeloma. She had no comorbidities. As treatment, she received 2 cycles of VAD, followed by 3 cycles of VCD, and subsequently underwent autologous bone marrow transplantation in January 2017. The patient, who did not receive maintenance treatment, applied to us with widespread body pain in April 2020, and a lesion observed in the lumbar region on the MRI was evaluated as a recurrence. Consequently,10 sessions of radiotherapy were applied to the lumbar region. In June 2020, in the patient who started lenalidomide treatment, due to difficulty in speech, severe headache, dizziness, and presyncope attacks on the 3rd day of treatment, dural sinus thrombosis was evaluated in the MRI, and the medication was discontinued. Upon the detection of findings suggestive of carcinomatous meningitis in the repeated cranial MRI performed by us, examinations were conducted for the differentiation of myeloma involvement from secondary malignancies. Due to the absence of a second malignancy in the examinations and the presence of plasma cells in the cerebrospinal fluid sample, it was accepted as myelomatous meningitis. Following the administration of 10 sessions of cranial radiotherapy, the patient received the first cycle of VD-PACE treatment protocol from us. The patient's symptoms improved. In conclusion, in a patient with multiplemyeloma presenting with neurological symptoms, myelomatous meningitis should be considered alongside more common possible causes.

Keywords: *multiple myeloma, myelomatous meningitis, plasma cell dyscrasias*

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