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ABHH
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HEMATOLOGY,
TRANSFUSION AND
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X Eurasian

Hematology Oncology Congress

EHOC 2024

Abstract Book

28 - 30 April 2024

EHOG
Eurasian Hematology Oncology Group

Welcome Address

Dear Colleagues,

We are happy to meet you at X Eurasian Hematology-Oncology Congress will be held as a face-to-face congress between 28-30 April 2024 at Hilton İstanbul Bakırköy.

We believe deep in our hearts that with its special concept, EHOC 2024 will fill in a significant gap in our region.

The attendees will be able to enjoy scientific programs in Adult Hematology.

EHOG is collaborating with several international societies as usual including.

- Brazilian Association of Hematology, Hemotherapy, and Cell Therapy (ABHH)
- European Society for Blood and Marrow Transplantation (EBMT)
- European Leukemia Network (ELN)
- Israel Society of Hematology and Transfusion Medicine
- Russian Oncohematology Society (ROHS)
- Society of Hematologic Oncology (SOHO)
- Society of Hematologic Oncology Italy (SOHO Italy)
- Society of Medical Oncology Pakistan (SMOP)

There will be online oral and poster presentation sessions. Pharmaceutical companies will get an opportunity to interact with the attendees in the exhibition area.

We hope that you will benefit in the best way possible of EHOC 2024.

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HEMATOLOGY, TRANSFUSION AND CELL THERAPY

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Oral Presentations

Adult Hematology Abstract Categories, Chronic Myeloproliferative Diseases

OP 01

RETROSPECTIVE ANALYSIS OF PRIMARY MYELOFIBROSIS PATIENTS IN AZERBAIJAN

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Objective: Primary myelofibrosis (PMF) is a rare Ph chromosome-negative chronic myeloproliferative neoplasm characterized by the proliferation of atypical clonal megakaryocytes and fibrosis of the bone marrow. The activation of the JAK-STAT pathway plays a central role in the pathogenesis of the disease. The majority of patients with primary myelofibrosis have one of three main genetic mutations, including JAK2 V617F, CALR exon 9, or MPL W515. The clinical features of the disease are highly heterogeneous. Common symptoms and signs include fatigue, constitutional symptoms, itching, abdominal discomfort, bone pain, anemia, leukocytosis, thrombocytopenia, and splenomegaly. A number of clinical studies on the demographic and clinical features of myelofibrosis have been carried out in different countries. Detailed demographic and clinical characteristics of patients with BMF have not been thoroughly studied in Azerbaijan. The aim of our study was to characterize the demographic, clinical, and laboratory parameters of patients with primary myelofibrosis in Azerbaijan. All patients were registered at the Azerbaijan National Center for Hematology and Transfusion. **Methodology:** A retrospective analysis was conducted on the demographic, clinical, and laboratory data of 131 patients diagnosed with PMF between January 1, 2011, and December 1, 2023. The diagnosis of all patients was revised according to the WHO 2016 criteria for PMF. The fibrosis of the bone marrow was assessed histologically according to the Thiele grading system. Ultrasound examination was used to assess splenomegaly, with a craniocaudal size of >14 cm being considered as splenomegaly. All data were collected from clinical records. This was a retrospective, observational, single-center study. **Results:** A total of one hundred thirty-one (131) patients with primary myelofibrosis were analyzed. Of these, 65 (49.6%) were male. The median age of the patients was 57.5 years (range 19-80), with 9 (6.87%) patients being under 40 years of age. The median hemoglobin level was 10.7 g/dl (range 2.1-19.4), median white blood cell count was 12.86 × 10^12/l (range 0.45-121), median platelet count was 322 × 10^12/l (range 24-1940), and median LDH was 530 U/l (range 181-1586). Splenomegaly was detected in 96 patients, with an average spleen size (19.5 cm)reported. Fifty-one patients had Hgb < 10 g/dl. At the time of diagnosis, the pre-fibrotic stage was identified in the bone marrow examination of sixteen patients (17.8%). Splenomegaly was detected in 96 (91.4%) patients. Of the 66 patients who underwent genetic testing, 44 had a positive Jak2V617F mutation, 2 had a positive CALR mutation, and 1 had a positive MPL mutation. **Conclusion:** Thus, this study has investigated the demographic, clinical, and laboratory characteristics of patients with primary myelofibrosis in Azerbaijan.

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OP 02

BIOCHEMICAL PROPERTIES OF RED BLOOD CELLS IN POLYCYTHEMIA VERA

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Objective: Polycythemia vera (PV) is a chronic myeloproliferative neoplasm characterized by an increase in red blood cell mass. Thrombotic complications are the main cause of morbidity and mortality in PV. Elevated hematocrit and increased blood viscosity are crucial risk factors for thrombus formation. The aim of our analysis is to evaluate the biochemical alterations in red blood cells (RBCs) and the hemoglobin structure in patients with PV that may be associated with thrombotic complications. **Methodology:** Blood samples were taken from 20 PV patients and 16 healthy individuals. The isolated RBCs were examined using Raman spectroscopy. **Results:** We found a larger contribution of ferrous heme iron, which is a molecular state typical for deoxyhemoglobin in PV samples compared to the control samples. Furthermore, a significant increase in the Fe II/Fe III ratio in PV samples was correlated with a higher hematocrit (Hct) to hemoglobin (Hgb) ratio. A positive trend between a higher Fe II/ Fe III ratio and a higher RDW-SD and RDW-CV was observed in PV samples. In RBCs collected from PV patients we observed a less stable hemoglobin structure. **Conclusion:** Higher values of RDW-SD and RDW-CV may reflect a higher Fe II/ Fe III and be a simple indicator of biochemical alterations in RBCs. A higher Hct/ Hgb ratio could indicate higher clonal myeloproliferative potential and be associated with shorter time to thrombosis in patients with PV. Our future analysis will focus on correlating the above observations with the prothrombotic activity to demonstrate a possible link between the biochemical alterations of RBCs and the thrombotic complications in PV.

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OP 03

SECONDARY SOLID CANCER FREQUENCY AND RISK FACTORS IN PHILADELPHIA- NEGATIVE CHRONIC MYELOPROLIFERATIVE NEOPLASMS

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Objective: Philadelphia chromosome-negative myeloproliferative neoplasms (Ph- MPNs) are characterized by clonal myeloproliferation and somatic mutations. Major complications of Ph-MPNs are thrombosis, bleeding, transformation to myelofibrosis and leukemia. One important concern in the course of Ph-MPNs is risk of development of secondary solid cancers (SSC). In a large cohort of Turkish Ph-MPN patients, we aimed to determine the types and frequencies of SSC, to identify risk factors for SSC including role of cytoreductive therapies and to study impact of SSC on survival in Ph-MPNs. **Methodology:** 1013 patients diagnosed with Ph-MPN from 1995 and 2022 under follow up at adult hematology sections of Istanbul Bakırköy Dr Sadi Konuk Hospital and Istanbul University Medical Faculty were included in this retrospective study. **Results:** Of the 1013 Ph- MPN patients enrolled in our study, 65, 46 and 37 patients were diagnosed with essential thrombocythemia (ET), polycythemia vera (PV) and primary myelofibrosis (PMF), respectively. Patient clinical and laboratory characteristics are summarized in Table 1. Sixty-seven patients (6.6%) developed SSC, predominantly carcinoma (64.2%), non-melanoma skin cancer (23.9%), sarcoma (4.5%), and melanoma (3%). Median time to SSC diagnosis was 80.03 ± 60.5 months with no significant difference among Ph-MPN subtypes. Compared to patients with no diagnosis of SSC, patients with SSC were older at time of Ph- MPN diagnosis (63 vs. 54 years; $p<0.001$) and included a higher proportion of males ($p=0.025$). Ph- MPN patients with SSC and without SSC showed no significant difference for complete blood count parameters, spleen size, Ph-MPN diagnosis groups, driver mutation frequencies and follow-up time. Arterial thrombosis frequency was higher in patients with SSC (37.3% vs. 25.3%; $p=0.030$). SSC rates were 5.7% in patients not exposed to cytoreductive treatment and 5.3%, 4% and 2.1% with exposure to ruxolitinib, anagrelide, and interferon (IFN), respectively. A trend toward lower SSC rates was noted with IFN therapy (3% vs. 97%; $p=0.066$). SSC incidence was significantly higher in patients exposed to hydroxyurea (HU) as first-line monotherapy compared to other treatment groups (7.8% vs. 4.6%; $p=0.046$). Median OS in patients with SSC and patients with no diagnosis of SSC group were 273 months and 195 months, respectively. PV patients, who developed SSC, had significantly worse median OS compared to PV patients without SSC (Figure-1). **Conclusion:** The strengths of our study are that it enrolls a larger patient population, includes PV, ET and PMF subgroups, separately examines development of SSC after MPN, has a long follow-up period and has multicenter design. In MPN patients, malignancy screening gains more importance for those aged ≥65 and males. Our study evaluated with data from previous studies suggest that increased risk of developing SSC in MPN patients may be associated with cytoreductive therapy. Further studies with more pateints are needed

to determine whether Ph- MPN patients are predisposed to development of SSC independent of cytoreductive therapy, to better assess risk of HU or RUX in promoting SSC development in MPNs, and to elucidate the potential protective effect of IFN.

Table-1 Ph- MPN clinical and laboratory characteristics

	MPN (n=1013)	PV (n=380)	ET(n=419)	PMF(n=214)	p**	PV vs ET*	PV vs PMF*	ET vs PMF*
Gender Female, n (%) Male, n (%)	497 (49.1%) 516 (50.9%)	122 (32.1%) 258 (67.9%)	266 (63.5%) 153 (36.5%)	109 (50.9%) 105 (49.1%)	<0.001	<0.001	<0.001	0.002
Age at MPN diagnosis, median (range) <65, n (%) ≥65, n (%)	54 (12-88) 736 (72.7%) 277 (27.3%)	55 (17-84) 284 (74.7%) 96 (25.3%)	51 (12-88) 312 (74.5%) 107 (25.5%)	57.5 (21-84) 140 (65.4%) 74 (34.6%)	<0.001 0.028	0.029 0.926	0.008 0.016	<0.001 0.017
JAK2V617F n (%)	730 (72.1%)	305 (80.3%)	269 (64.2%)	156 (72.9%)	<0.001	<0.001	0.039	0.019
CALR n (%)	71 (7%)	.	58 (13.8%)	13 (6.1%)	.	.	.	0.003
MPL n (%)	4 (0.4%)	.	3 (0.7%)	1 (0.4%)	.	.	.	1.000
Triple negative n (%)	136 (13.4%)	.	90 (21.5%)	46 (21.5%)	.	.	.	0.996
WBC at MPN diagnosis, median (range)	10400 (2300-94000)	10795 (2510-34300)	9900 (4200-51400)	11350 (2300-94000)	<0.001	<0.001	<0.001	<0.001
HB at MPN diagnosis, median (range)	14.7 (5.5-24.5)	17.8 (11.4-24.5)	13.6 (6.7-17.1)	11.4 (5.5-19.5)	<0.001	<0.001	<0.001	<0.001
HCT at MPN diagnosis, median (range)	44.5 (14-85)	54 (36-85)	41 (21-55.5)	35.4 (14-62.7)	<0.001	<0.001	<0.001	<0.001
PLT at MPN diagnosis, median (range)	636000 (28000-2786000)	(40600-1818000)	853000 (110000-2786000)	425500 (28000-230	<0.001	<0.001	0.204	<0.001
Spleen size at MPN diagnosis, median (range)	120 (70-340)	120 (87-260)	120 (75-301)	178 (70-340)	<0.001	0.113	<0.001	<0.001
CV Risk n(%)	716(70.7%)	300(78.9%)	278(66.3%)	138(64.5%)	<0.001	<0.001	<0.001	0.640
Thrombosis, n (%) Arterial, n (%) Venous, n (%)	356 (35.1%) 264(25.1%) 92(12.3%)	144(37.9%) 110(28.9%) 42(11.1%)	138(32.9%) 107(25.2%) 48(11.5%)	74(34.6%) 47(22%) 34(15.9%)	0.335 0.168 0.184	0.143 0.279 0.857	0.421 0.064 0.090	0.678 0.321 0.116
Cytoreductive Therapy, n (%) Hydroxyurea, n (%) IFN, n (%) RUX, n (%)	871(86%) 831(82%) 94(9.3%) 95(9.4%)	314(82.6%) 311(81.8%) 16(4.2%) 15(3.9%)	355(84.7%) 327(78%) 59(14.1%) 5(1.2%)	202(94.4%) 193(90.2%) 19(8.9%) 75(35%)	<0.001 <0.001 <0.001 <0.001	0.425 0.181 <0.001	<0.001 0.006 0.02 <0.001	<0.001 <0.001 0.06 <0.001
Secondary Solid Cancer n (%)	67 (6.6%)	31 (8.4%)	26 (6.2%)	10 (4.7%)	0.236	0.284	0.108	0.431

Table-2 Clinical and laboratory characteristics of patients with secondary solid cancer

	SSC (n=67)	Non-SSC (n=946)	P.
Gender Female n (%) Male n (%)	24 (35.8%) 43 (64.2%)	473 (50.0%) 473 (50.0%)	0.025
Age at MPN diagnosis, median (range) <65 n (%) ≥65 n (%)	63 (37-78) 24 (35.8%) 43 (64.2%)	54 (12-88) 24 (35.8%) 43 (64.2%)	<0.001 0.001
WBC at MPN diagnosis, median (range)	10160 (3900-57260)	10400 (2300-94000)	0.457
HB at MPN diagnosis, median (range)	15.6 (5,8-21)	14.6 (5.5-24.5)	0.734
HCT at MPN diagnosis, median (range)	45.12 (19-69.5)	44.40 (14-85)	0.882
PLT at MPN diagnosis, median (range)	621000 (80000-2786000)	645500 (28000-2631000)	0.803
Spleen Size (mm) at MPN diagnosis, median (range)	120 (102-320)	120 (70-340)	0.658
Diagnostic Group PV n (%) ET n (%) PMF n (%)	31 (46.2%) 26 (38.8%) 10 (14.9%)	349 (36.9%) 393 (41.5%) 204 (21.6%)	0.236
Driver mutation JAK n (%) CALR n (%) MPL n (%) Triple Negative n (%)	49 (73.1%) 7 (10.4%) 1 (1.6%) 10 (14.9%)	681 (84.9%) 65 (8.1%) 3 (0.4%) 53 (6.6%)	0.201
Thrombosis n (%) Arterial n (%) Venous n (%)	30 (44.8%) 25 (37.3%) 6 (9.0%)	326(34.5%) 239 (25.3%) 118 (12.5%)	0.069 0.03 0.396
Cytoreductive Therapy None Cytoreductive Therapy Hydroxyurea Hydroxyurea monotherapy Interferon Therapy Interferon monotherapy Ruxolitinib Ruxolitinib monotherapy Anagrelide Anagrelide monotherapy	8(5.7%) 58(7.0%) 49 (7.8 %) 2 (2.1%) 1 (4.5 %) 5 (5.3%) 0 (0.0 %) 4 (4.0%) 0 (0.0 %)	133 (94.3%) 773 (93.0%) 576 (92.2%) 92 (97.9%) 21 (95.5%) 90 (94.7%) 7 (100.0%) 96 (96.0%) 4 (100.0%)	0.628 0.317 0.046 0.066 1,000 0.578 1,000 0.268 1,000

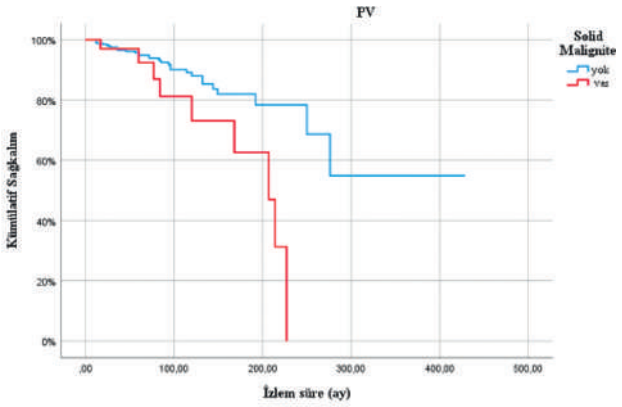

Figure-1 Overall Survival PV patients

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Adult Hematology Abstract Categories, Coagulation Diseases

OP 04

EFFECT OF HEREDITARY THROMBOPHILIA ON ARTERIAL THROMBOSIS

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Objective: Screening for hereditary thrombophilia is recommended for venous thrombosis, but there is conflicting information about the causal relation with arterial thrombosis. In this study, in order to clarify these conflicting results and recommendations, it was aimed to determine whether there is a relation between arterial thrombosis and hereditary thrombophilia tests, to determine whether the treatment plan changes according to the test results of patients with hereditary thrombophilia panel, and t **Methodology:** In this single-centre, non-intervention, retrospective cohort study, 200 patients over the age of 18 who were performed hereditary thrombophilia tests by various clinics between 12/02/2019 and 01/07/2022 were included. The patients had no history of disease predisposing to thrombosis, no rheumatological disease, negative antiphospholipid antibodies, and arterial thrombosis. As a control group, 50 patients without arterial and venous thrombosis were included. **Results:** When the

patient group with arterial thrombosis was compared with the control group, no difference was found in the risk of thrombosis in terms of factor V Leiden, prothrombin, Factor XIII, MTHFR 677, MTHFR 1298, PAI-1 gene mutation (p=0.084, p=0.82, p=1, p=0.65, p=0.064, p=1, respectively). In our study, no significant difference was found in the increased risk of thrombosis in the detection of thrombophilic gene tests in arterial thrombosis compared with the control group. **Conclusion:** In our study, thrombophilia gene panel screening was not considered necessary in patients with arterial thrombosis, and it was observed that factor V Leiden, prothrombin, Factor XIII, MTHFR 677, MTHFR 1298, PAI-1 gene mutations in the hereditary thrombophilia panel did not lead to an increased risk of arterial thrombosis. Hereditary thrombophilia testing is not recommended in patients with arterial thrombosis according to current guidelines.

https://doi.org/10.1016/j.htct.2024.04.006

OP 05

SURGICAL INTERVENTIONS IN FACTOR VII DEFICIENCY: A SINGLE CENTER EXPERIENCE

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Objective: FVII deficiency is the most common of the rare congenital bleeding disorders with a prevalence of about 1:500,000. Bleeding symptoms are considerably variable in terms of both location and severity, and may have a heterogenous spectrum ranging from asymptomatic conditions to serious/life-threatening bleeds In surgical interventions, the duration of treatment and factor dose should be determined by considering the patient's previous and current bleeding clinic, factor level and comorbidities. **Methodology:** We aimed to share our experience of surgical interventions and bleeding management in individuals with factor VII deficiency between January 2023 and January 2024 who followed up in our outpatient clinic. **Results:** A total of 14 surgical interventions were performed in 12 patients with factor VII deficiency between January 2023 and January 2024 at Ege University Hemophilia Outpatient Clinic. 4 tooth extractions, 2 septorhinoplasties, 1 tympanoplasty, 1 tympanomastoidectomy, 1 lung wedge resection, 1 cataract and 4 orthopedic procedures (arthrodesis, radius fracture repair, total hip replacement and arthroscopy) were performed. The median age was 43 years (20-78 years), 7 of patients were female and 5 were male. 7 patients had ISTH bleeding score below 5 and 4 patients had no bleeding diathesis. Preoperative factor VII levels of the patients varied between 5-36%. Recombinant factor VIIa (rfVIIa) was used in 85% (n=12) and FFP in 15% (n=2) of the procedures. Median duration of treatment was 2.5 days (1-8 days). The median preoperative rfVIIa dose was 15 mcg/kg (10-30 mcg/kg), while the median single dose given in the postoperative period was 16.7 mcg/kg. While a single dose was administered in minor interventions such as tooth extraction, the mean number of total doses administered during treatment in other interventions was 11. In one patient, the procedure was performed with TDP due to the presence of both factor VII deficiency (FVII:36) and hypofibrinogenemia, low bleeding score and no previous history of postoperative bleeding. In another patient who underwent tooth extraction, the procedure was performed with FFP because the factor level was >30% and there was no previous bleeding history. The preoperative FFP dose was 15-20 ml/kg in patients that receiving FFP. Effective bleeding control was achieved and no thrombosis was observed in patients receiving both FFP and rFVIIa. **Conclusion:** The correlation between FVII activity and bleeding tendency is poor, although severe bleeding is most commonly associated between low FVII activity levels and the surgical risk of bleeding.Plasma-derived and recombinant FVII concentrates are currently used for treatment. In countries where access to these products is lacking, fresh frozen plasma and prothrombin complex concentrates are also used, though they contain low amounts of factor FVII. In patients included in the recording system established for patients with FVII deficiency (STER) and who underwent surgical procedures, use of rFVIIa was evaluated in 110 elective surgical procedures performed on 95 patients were examined, and it was shown that neither FVII level nor surgical procedure influenced rFVIIa replacement treatment, and only the patient's phenotype of bleeding was effective in replacement treatment. it was shown that the lowest effective dose of rFVIIafor hemostasis was 13 μg/kg on the day of surgery, and at least three doses were needed.In same study, it was recommended to give a mean total dose of 20 micrograms/kg rFVIIa in invasive interventions and minor surgeries. Furthermore in majör surgeries it is recommended to give rFVIIa at a single dose of 13 mcg/kg in the first 24 hours after operation and at least three administrations needed. Similarly, in our clinic, a median dose of 15 mcg/kg was administered before surgical interventions. Before invasive procedures and minor interventions, rFVIIa was administered in the range of 10-30 mcg/kg. Afterall rFVIIa for factor VII deficiency was well tolerated and maintained effective hemostasis with good clinical outcomes. In factor VII deficiency, surgical intervention and management of spontaneous bleeding may be difficult due to the variability of symptoms and bleeding clinic and the independence of bleeding risk from factor level. However, a road map can be drawn by considering published studies, center experiences and evaluating the clinical characteristics of the patient.

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Adult Hematology Abstract Categories, Lymphoma

OP 06

AUTOLOGOUS PERIPHERAL BLOOD STEM CELL TRANSPLANTATION IN PATIENTS WITH HIV-ASSOCIATED LYMPHOPROLYPHERATIVE DISORDER

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Objective: Autologous transplantation of bone marrow/peripheral blood stem cells in patients with HIV-associated lymphopoliferative disorder is a feasible and relatively safe therapeutic option. However, at the moment there are a number of unsolved problems, including optimal risk/benefit pre-transplant conditioning, taking into account drug-drug interactions and indications for hematopoietic stem cell transplantation. **Methodology:** Since 2020 PBSCT has been performed in 15 patients with HIV in our center. The 12 (80%), had diagnosis of HIV-associated plasmablastic lymphoma (HIV-PBL), 3 patients (20%) were with HIV-associated Hodgkin' lymphoma (HIV-HL). All of the patients with HIV-PBL were transplanted after completion of a first-line treatment and achievement of at least a partial response. The pre-transplant conditioning was performed using BEAM-like regimens. **Results:** Toxicity from organs and systems did not exceed grade 2 (moderate) mainly from the gastrointestinal tract, no need antiretroviral therapy in all of the cases. Median time to neutrophil engraftment was +12 days, while to platelet engraftment was +13 days. At the time of submitting the abstract all of the transplanted patients described above except one (lethal case due to progression of concomitants hepatitis C virus (HCV) infection) are in the state of remission. **Conclusion:** Autologous transplantation of peripheral blood stem cells in patients with HIV is a feasible and relatively safe option with clear planning of the patient's treatment strategy from the first day of therapy and accompanying consideration of drug-drug interactions which is confirmed both by world literature and our Center's own experience.

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Adult Hematology Abstract Categories, Platelet Diseases

OP 07

MAINTENANCE LOW-DOSE CORTICOSTEROID THERAPY IN PATIENTS WITH CHRONIC ITP: SINGLE CENTER RESULTS

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Zonguldak Bulent Ecevit University Faculty of Medicine Hematology Department

Objective: Immune thrombocytopenia (ITP) is an acquired, autoimmune disease affecting 2 to 4 individuals per 100,000 annually. ITP is characterized by an isolated platelet count of $<100 \times 10^3/\mu$L. The diagnosis of primary ITP relies on excluding non-immune causes of thrombocytopenia (myelodysplastic syndrome, inherited thrombocytopenia) and secondary immune thrombocytopenia caused by other conditions such as autoimmune diseases (systemic lupus erythematosus), malignancies (chronic lymphocytic leukemia), infections (hepatitis C virus and HIV), and medications. The clinical manifestations of ITP range from entirely asymptomatic patients to increased petechiae-ecchymosis and rarely major or life-threatening bleeding. Corticosteroids are the first-line treatment. Initial treatment for ITP consists of methylprednisolone at a dose of 1mg/kg/day or dexamethasone administered at 40mg/day for 4 days, repeated every 14-28 days. While >75% of adult patients respond to corticosteroids, only 20-30% remain in continuous remission after cessation." **Methodology:** We have 114 registered patients with immune thrombocytopenia (ITP) in our clinic over the past 5 years. Among these patients, a subgroup of 45 who received high-dose corticosteroid treatment as first-line therapy, responded to corticosteroids, but subsequently experienced loss of response, was identified as corticosteroid-sensitive. This group was selected for follow-up with maintenance low-dose steroid (LDS) therapy for 1 year. Patients were treated with 4 mg of methylprednisolone for 4 days per month and followed up for 12 months. Among our patients, 18 achieved response with platelet levels $>30 \times 10^3 / \mu$ L without signs of bleeding (see Table 1), while in 27 patients, additional corticosteroid doses were added or second-line treatment modalities such as splenectomy or eltrombopag were initiated due to platelet levels dropping below $30 \times 10^3 / \mu$ L " **Results: Conclusion:** The goal of treatment in a patient with ITP is not only to normalize platelet counts but also to achieve a level of platelets that can prevent clinically significant bleeding. Based on this premise, we have demonstrated that maintenance corticosteroid therapy at an acceptable cumulative dose can reliably maintain platelet levels within a safe range. We believe that this should be further supported by larger multicenter studies."

Table 1: Demographic characteristics of patients responsive to low-dose steroid treatment"

Female/Male	12/6
Median age	52
1.month median trombocyte	$32 \times 10^3 / \mu$ L
3. month median trombocyte	$55 \times 10^3 / \mu$ L
12. month median trombocyte	$87 \times 10^3 / \mu$ L

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Adult Hematology Abstract Categories, Stem Cell Transplant

OP 08

FLUDARABINE-INDUCED BRADYCARDIA IN ALLOGENEIC HEMATOPOIETIC STEM CELL TRANSPLANTATION

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Objective: Fludarabine, a purine analog, is getting more attention with the increasing use of reduced intensive conditioning regimens in allogeneic hematopoietic stem cell transplantation (allo-HSCT). Bradycardia was observed in only a few cases reported in the literature. In clinical practice, bradycardia can be asymptomatic or cause syncope and cardiac arrest. This study aimed to evaluate the bradycardia side effect of fludarabine used in allo-HSCT recipients and to increase awareness of this issue. **Methodology:** This retrospective study included 73 patients who received fludarabine in the allo-HSCT conditioning regimen between January 2015 and January 2021. Patients with and without bradycardia were compared regarding demographic data, allo-HSCT characteristics, electrolyte values, fludarabine administration dose and duration, and survival. Univariate and multivariate analyzes were performed to evaluate independent predictors for fludarabine-induced bradycardia (FİB). **Results:** Fludarabine doses were higher in the bradycardia group, but not statistically significant. Age was the only independent predictor of FİB (OR 0.93, 95% CI: 0.89-0.98, p =0.007). The median age in the group with bradycardia was 19 years younger than those without bradycardia (34 (19-49) vs 53 (19-69), p=0.005). In 11 (84.6%) of the patients who had bradycardia, bradycardia improved with the discontinuation of fludarabine alone, but atropine was administered in 2 (15.4%) patients. **Conclusion:** Bradycardia was observed in 17.8% of our patients who used fludarabine in the conditioning regimen. Age was the only independent predictor of fludarabine-induced bradycardia; therefore, close heart rate monitoring is recommended during fludarabine administration, especially in younger patients. Although our results are promising, further studies evaluating the fludarabine intermediate fluoroadenosine are needed to support our results.

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Adult Hematology Abstract Categories, Other Diseases

OP 09

A STRATEGY FOR DIRECT DELIVERY OF ANTIGENIC CONSTRUCTS TO DENDRITIC CELL RECEPTORS

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Presentation Type Oral

Objective: C-type lectin receptors (CLRs) expressed by DC are considered attractive targets for effective targeting of antigen to antigen-presenting cells, since the participation of CLRs can additionally stimulate antigen presentation and, accordingly, subsequent activation of T cells. To study the ability of DC to enhance antigen capture and presentation using a library of fluorescein-labeled polyacrylamide glycoconjugates. **Methodology:** DC was obtained by culturing human peripheral blood monocytes in a complete RPMI-1640 nutrient medium containing GM-CSF, IL-4 and TNFa. Immunophenotypes were analyzed using flow cytometric analysis. In our study, synthetic FSL (Function-Spacer-Lipid) constructs will be used: polyacrylamide glycoconjugate (Adi-sp)3-βDD-PAA-Fluo, conjugate N-acetyllactosamine, glycolipid (Adi-sp)3-βDD ((Adi-sp)3-βDD-DOPE). Next, the binding of these cells to glycoprobes was investigated. **Results:** A new class of glycoconjugates specific for binding to C-type lectin receptors has been synthesized. The key cytokines for the cultivation of DC are GM-CSF (final concentration 80 ng/ml), IL-4 (final concentration 10 ng/ml), as well as differentiation inducers: TNF-α, PGE2. Mapping of human blood cells using a library of fluorescein-labeled polyacrylamide glycoconjugates showed that the studied glycoprobes bind to more than 15% of the human leukocyte population. **Conclusion:** In our proposed research project, a new approach will be used to study the strategy of enhancing the capture and presentation of antigen by dendritic cells by targeting C-type lectin receptors.

https://doi.org/10.1016/j.htct.2024.04.011

OP 10

SHIFTING PARADIGMS: EXPLORING ENARODUSTAT FOR ANEMIA IN CHRONIC KIDNEY DISEASE IN A META ANALYSIS OF RANDOMIZED CONTROLLED TRIALS

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Objective: Anemia commonly accompanies chronic kidney disease (CKD). Erythropoiesis-stimulating agents (ESAs), such as darbepoetin, are initiated for anemia in CKD. Additionally, hypoxia-inducible factor (HIF) prolyl hydroxylase inhibitors have demonstrated efficacy in treating CKD-associated anemia. This meta-analysis aims to compare the efficacy, safety, and tolerability of enarodustat in anemic CKD patients. **Case report Methodology:** A systematic search of Cochrane CENTRAL, Ovid Medline R, PubMed, and Web of Science databases up to March 1, 2024, was conducted. Randomized controlled trials (RCTs) directly comparing enarodustat with darbepoetin were included. Data from four unique RCTs comprising an inverse variance-weighted random-effects model were utilized for the main analysis. Primary efficacy outcome measures included hemoglobin (Hb) change at weeks 4-6 and during follow-up, while primary safety outcomes focused on serious adverse events (SAEs). Subgroup analyses were performed based on dialysis status and prior use of ESA for the primary outcome. **Results:** Four RCTs with 7 reports involving 586 patients were included in the main analysis. Enarodustat demonstrated superiority to control in terms of change in Hb levels at week 4-6 (RR 0.76, 95% CI 0.02 to 1.50, I2=96%, p=0.04) but non-inferiority during follow-up (MD 0.66, 95% CI -0.22 to 1.53, I2=91%, p=0.14). Enarodustat exhibited comparable effects for safety and tolerability parameters such as SAEs (RR 1.17, 95% CI 0.72 to 1.91, I2=0%, p=0.52), any adverse events (RR 0.95, 95% CI 0.82 to 1.08), any adverse events leading to discontinuation (RR 0.90, 95% CI 0.37 to 2.20), diarrhea (RR 1.50, 95% CI 0.05 to 43.15), hypertension (RR 0.89, 95% CI 0.43 to 1.84), and all-cause mortality (RR 0.63, 95% CI 0.08 to 5.08). Subgroup analysis by dialysis status revealed nonsignificant differences for change in Hb levels at week 4-6 and during follow-up, but comparator-based subgroup analysis demonstrated a significant difference only when comparing to placebo at week 4-6. **Conclusion:** Enarodustat exhibits promise as a treatment option for anemia associated with CKD, demonstrating superiority to control in terms of Hb change at week 4-6 and non-inferiority during follow-up. Moreover, it demonstrates comparable safety and tolerability profiles to darbepoetin, making it a potential alternative in the management of CKD-related anemia.

https://doi.org/10.1016/j.htct.2024.04.012

OP11

A VERY RARE RELAPS TYPE IN MULTIPLE MYELOMA: LEPTOMENGEAL AND CRANIAL INVOLVEMENT

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Dicle University Hospital, Department of Hematologyi Diyarbakir

Case report: Multiple myeloma is a hematological malignancy that develops as a result of clonal proliferation of plasma cells and progresses with remissions and relapses. It is clinically characterized by many symptoms and signs such as osteolytic bone lesions, hypercalcemia, renal dysfunction, hypergammaglobulinemia and anemia. However, involvement of the central nervous system, especially the leptomeningeal/cranial region, is a rare and prognostically important form of relapse of the disease. Nervous syste

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Adult Hematology Abstract Categories, Stem Cell Transplant

OP 12

Can autologous stem cell transplantation be a treatment option in a patient diagnosed with secondary progressive multiple sclerosis?:Case report

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Case report: İntroduction: Multiple sclerosis (MS) manifests itself with plaque formation as a result of defensive T and B cells in the immune system perceiving the myelin sheath around nerve cells as a foreign substance to the body and trying to destroy it, for an unknown reason.In short, it is an autoimmune inflammatory demyelinating disease of the central nervous system. In multiple sclerosis, various interventions such as medication, physical therapy, and stem cell therapy are used to improve patients' quality of life. The goal of autologous hematopoietic stem cell transplantation (AHSCT) is to eliminate and replace the patient's pathogenic immune system to achieve long-term remission of MS. Here, we will present our experience with autologous stem cell transplantation performed in our center for an MS case that had previously received both medical and physical therapy and failed to respond.

Key words: multiple sclerosis, autologous stem cell transplantation

Case report: The 41-year-old male patient was diagnosed with MS in 2012 and has been wheelchair-bound for about 3 years. Glatiramer acetate was started at the time of diagnosis. As the patient's complaints increased, fampridine and ocrelizumab treatments were given, respectively. The patient, who did not respond to treatment, was evaluated as having secondary progressive MS and an autologous stem cell transplant was planned. Mobilization was performed with cyclophosphamide + G-CSF in July 2023. In September 2023, AHSCT was performed with cyclophosphamide (40 mg/kg, 2400 mg in total, 5 days), Mesna (40 mg/kg/day, 2400 mg in total, 5 days) and ATG (360 mg in total) protocol. The patient, who had platelet engraftment on day +9 and neutrophil engraftment on day +11 after AHSCT, was discharged with outpatient clinic control. **Discussion and conclusion:** Despite many advances in MS treatment, there is still no definitive treatment answer. Autologous hematopoietic stem cell transplantation may be promising, as observed in several studies. The aim of AHSCT is to eliminate and replace the patient's pathogenic immune system to ensure long-term remission of

MS (1). In the MIST study; One group of patients with relapse-refractory MS (RRMS) underwent myeloablative AHSCT with cyclophosphamide (200 mg/kg) and antithymocyte globulin (ATG), and the other group was given disease-modifying therapy. During an average follow-up of 2 years, disease progression was 5% in the AHSCT group and 62% in the other group. In addition, those who underwent AHSCT had fewer relapses, and the rate of lesion healing on MRI was observed to be higher in the AHSCT group (2). In the HALT-MS study, event-free survival and improvement in neurological functions were observed at higher rates in patients who underwent AHSCT after high-dose immunotherapy (3-4). In a study conducted in Sweden, no recurrence or progression was observed in the first 3 years of treatment after AHSCT, and it was also stated that no new lesions developed on MRI (5). Although studies show the potential benefits of AHSCT, more long-term data from randomized controlled trials are needed to evaluate the effectiveness and safety of this intervention in the treatment of RRMS.

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OP 13

Autologous stem cell transplantation experience in an adult recurrent medulloblastoma patient: Case report

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Case report: Introduction: Medulloblastoma is the most common malignant primary embryonal brain tumor in children and occurs in the cerebellum. Approximately 70% of patients are diagnosed before the age of 20. The disease is rare after the 4th decade of life. It originates from the brainstem and metastasizes to other brain tissue, ventricles and medulla spinalis via CSF. Metastasis to bone, bone marrow, lung or lymph nodes outside the CNS is a very rare condition. Surgery, chemotherapy and radiotherapy are used in the treatment of medulloblastoma. In some patients (patients in the high-risk group, relapsed/refractory patients), autologous stem cell transplantation(ASCT) is performed following high-dose chemotherapy to increase survival rates. Here, we will present a case of medulloblastoma in which we performed autologous stem cell transplantation in our center.
Key words: Medulloblastoma, autologous stem cell transplantation
Case report: A 30-year-old male patient applied to the neurology clinic in May 2020 with complaints of headache, dizziness, nausea, vomiting and fainting. In the brain imaging, a 6×4 cm mass lesion was observed in the posterior fossa, located in the ventricle and causing compression symptoms (Cystic Astrocytoma? Medulloblastoma?). The patient underwent ventriculoperitoneal shunt and subtotal mass excision at the neurosurgery clinic. The biopsy pathology result was reported as medulloblastoma (classical type, p53 mutation positive). Chemotherapy was recommended by the oncology clinic, but the patient did not accept the treatment. In August 2020, the patient was given cranial RT and was subsequently followed without medication. in June 2023 due to complaints of pain and weakness in both lower extremities, there was an intradural mass lesion (25×19 mm) obliterating the spinal cord at the T11-T12 level and extending to the extraspinal area, and a diffuse mass lesion within the spinal cord at the T10 level with a craniocaudal length of 17 mm. Mass excision as a result of pathology; It was reported as classical medulloblastoma (non-WNT/non-SHH group (grade 4)). After the patient was given 2 courses of mini-ICE chemotherapy, a nearly complete response in the imaging. The patient was mobilized with G-CSF. In our center, the patient was performed autologous stem cell transplantation (6.55×10^6 /kg cells) with temozolamide ($2 \times 200 mg/m^2$ on days -6,-5,-4), etoposide (100 mg/m^2 on days -7,-6,-5,-4,-3,-2), thiotepa (300 mg/m^2, on days -4,-3,-2) protocol in November 2023.The patient, who had neutrophil and platelet engraftment on the 10th day after transplantation, was discharged with outpatient clinic control. **Discussion and conclusion:** Although the prognosis has improved in children with medulloblastoma, an estimated 20-30% will relapse following initial treatment (1). Recurrences may be local or widespread (brain and vertebra) (2,3,4). In case of recurrent disease after initial treatment, the likelihood of long-term survival is significantly reduced. Autologous hematopoietic cell transplantation after high-dose chemotherapy has been evaluated in small series and resulted in prolonged disease-free survival in approximately 20-25% of patients (7,8). In the study conducted by Eduvian et al., they showed that autologous stem cell transplantation after chemotherapy has a definite, albeit limited, role for selected pediatric brain tumors with poor prognosis and complete/partial remission before transplantation(9).

https://doi.org/10.1016/j.htct.2024.04.015

OP 14

AUTOLOGOUS STEM CELL TRANSPLANTATION EXPERIENCE IN B-ALL DEVELOPING DURING MAINTENANCE LENALIDOMIDE TREATMENT:CASE REPORT

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Case report: Introduction: Secondary leukemias that occur after chemotherapy are mostly myelodysplastic syndrome and acute myeloid leukemias.With the recent increased use of immunomodulatory (IMID) drugs (pomalidomide, thalidomide and lenalidomide); It has been shown that secondary leukemias increase. Acute lymphoblastic leukemia (ALL) has frequently been described in association with IMID. Here, we present our second ASCT experience in a case who underwent autologous stem cell transplantation (ASCT) with the diagnosis of multiple myeloma and developed B-ALL during the maintenance lenalidomide treatment.

Key words: Multipl myelom, B-ALL, autologous stem cell transplantation

Case report: A 62-year-old female patient was diagnosed with multiple myeloma (MM) in 2017.The patient was given 4 cycles of BED (bortezomide, cyclophosphamide, dexamethasone) treatment.The patient, who was in remission, underwent ASCT with Melphalan 200 mg/m2 preparation regimen in 2018.After ASCT, the patient was started on lenalidomide maintenance treatment. Approximately 4 years later, in 2022, during the course of lenalidomide treatment, CALLA+ B-ALL was diagnosed with a bone marrow biopsy.The patient was given hyper-CVAD Chemotherapy. The patient, who was in remission after the treatment, underwent ASCT again in 2023, for the second time with the TBI + endoxan protocol (3.8×106/kg cells) with peripheral blood stem cells collected during the previous MM disease period. **Discussion and conclusion:** ALL can develop due to cytotoxic agents and immunomodulatory (IMID) drugs such as alkylating agents and topoisomerase inhibitors. Alkylating agents such as Melphalan can cause the development of AML or MDS, often through unbalanced chromosomal abnormalities from first use. The incidence of secondary ALL developing after primary malignancy is 2.3%. Secondary malignancies are a known, albeit rare, complication of long-term lenalidomide therapy. However, the incidence of secondary ALL due to lenalidomide is very low. Parrondo et al demonstrated a significant increase in the risk of secondary malignancies following lenalidomide maintenance following high-dose melphalan and autologous hematopoietic stem cell transplantation in patients with multiple myeloma (MM). 4-17% of these malignancies are hematological malignancies. After ASCT, maintenance lenalidomide has now become the standard treatment for multiple myeloma. Lenalidomide creates a basis for the development of hematological malignancy secondary to treatment in these patients. However, considering the use of melphalan in the chemotherapy regimen before ASCT, lenalidomide alone cannot be blamed for treatment-related ALL. However, as a result of our literature review, there is a stronger association between lenalidomide maintenance therapy and treatment-associated ALL in multiple myeloma patients. Therefore, in case of suspicious hematological findings in patients receiving maintenance lenalidomide treatment, bone marrow aspiration and biopsy samples should be carefully evaluated for leukemia.

https://doi.org/10.1016/j.htct.2024.04.016

OP15

A Case of Multiple Myeloma with Atypical Cutaneous Presentation Treated by Daratumumab + CYBORG

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This case report illustrates the unconventional progression of multiple myeloma (MM) in a 57-year-old male, primarily highlighted by a cutaneous manifestation on the right cheek malar region, indicative of disease recurrence. Initially diagnosed following back pain and dyspnea, the patient's journey took a distinctive path from standard multiple myeloma treatments to the innovative application of daratumumab + CYBORG therapy. The biopsy from the lesion confirmed the recurrence of plasma cell neoplasia, leading to the adoption of daratumumab + CYBORG therapy. This innovative treatment strategy underscores the evolving landscape of MM management, particularly in cases presenting with atypical symptoms such as cutaneous involvement. The implementation of daratumumab + CYBORG therapy in this context not only highlights its potential as a significant advancement in MM treatment.

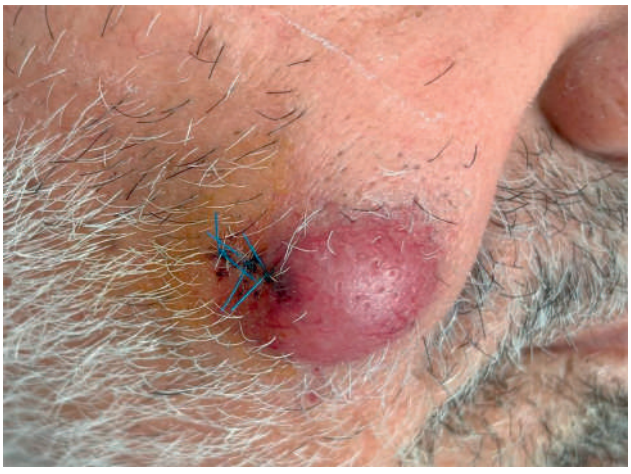

Image 1. Skin lesion on face._

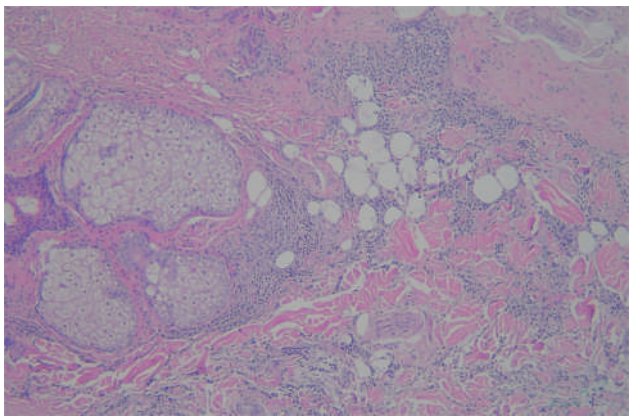

Image 2. Microscopic image of a biopsy taken from skin lesion.

https://doi.org/10.1016/j.htct.2024.04.017

OP16

Essential Thrombocythemia Complicated by Addison's Disease: A Case of Overlapping Endocrine and Hematological Disorders

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This case report delves into the intricacies of managing a patient diagnosed with both essential thrombocythemia and Addison's disease, illustrating the challenges and importance of an integrated approach to complex, coexisting conditions. A 47-year-old woman presented with enduring symptoms of fatigue, skin darkening, and appetite loss, which progressively led to substantial weight loss. Initially treated for essential thrombocythemia, a common yet serious myeloproliferative disorder, her condition did not fully improve with standard therapy, including hydroxyurea. Further evaluation was prompted by her deteriorating clinical status, characterized by severe hypotension and exacerbated systemic symptoms, leading to the diagnosis of primary adrenal insufficiency or Addison's disease. The confirmation of Addison's disease, alongside essential thrombocythemia, necessitated a tailored therapeutic strategy that addressed both endocrine and hematological aspects. With the initiation of appropriate therapy targeting Addison's disease, alongside ongoing management of essential thrombocythemia, the patient experienced a significant alleviation of symptoms and stabilization of her condition. This case underscores the necessity for vigilance and comprehensive evaluation in patients with non-specific systemic symptoms, highlighting the potential for concurrent, serious medical diagnoses.

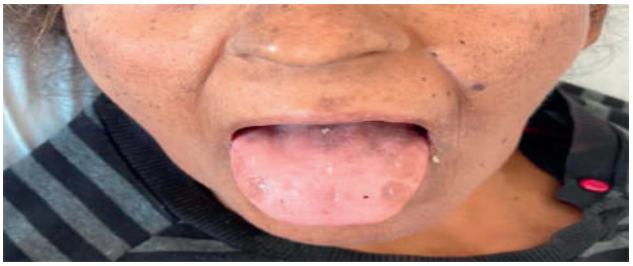

Image 1. Mucosal and skin hyperpigmentation in Addison's disease.

https://doi.org/10.1016/j.htct.2024.04.018

OP17

A Rare Intersection: Case Study on Sickle-Cell Thalassemia and Lymphoma

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This case study explores the rare and complex coexistence of sickle-cell thalassemia (S-talassemia) and lymphoma in a 37-year-old individual, presenting an exceptional diagnostic and therapeutic challenge. Initially evaluated for non-specific symptoms including abdominal pain, nausea, and vomiting, the patient underwent extensive diagnostic investigations revealing a multifaceted clinical picture. Advanced imaging identified multiple abnormal findings, including hyperdense gallbladder stones, increased reticular density in the mesenteric root, and nodular lesions in the thyroid gland, without the presence of mass lesions in the lung parenchyma. Biopsies confirmed the presence of high-grade B-cell, diffuse large B-cell lymphoma (DLBCL), showcasing an aggressive non-germinal center phenotype. Interestingly, immunohistochemistry results pointed towards a complex interplay of markers, with notable findings such as cMYC 80% positivity and a Ki67 proliferation index of 80% positive. The dual diagnosis of S-talassemia and lymphoma, especially considering the rarity of their co-occurrence, posed a significant challenge in terms of treatment decision-making and highlighted the critical need for patient-centered care, taking into account the ethical and autonomy considerations. This case contributes to the limited literature on the intersection of hemoglobinopathies and lymphoma, offering insights into the diagnostic dilemmas and therapeutic strategies in managing such rare comorbid conditions.

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OP18

Peripheral T-cell Lymphoma with Jaundice: Insights from a Complex Case

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CASE: Peripheral T-cell lymphomas (PTCLs) are a heterogeneous group of aggressive non-Hodgkin lymphomas with a rare occurrence, representing less than 15% of all adult non-Hodgkin lymphomas. The diagnosis and treatment of PTCLs pose significant challenges due to their diverse presentations and the aggressive nature of the disease. This case report discusses a 58-year-old male with a long-standing history of diabetes mellitus and previous bypass surgery, who presented with jaundice, hepatosplenomegaly, and ascites. Laboratory findings showed anemia, elevated liver enzymes, and hyponatremia. Imaging and biopsy results revealed nodular lung lesions, hepatosplenomegaly, liver mass lesions, bile duct dilatation, abdominopelvic lymphadenopathies, and T-cell lymphoma infiltration. The patient's treatment protocol included the CHOEP + BV regimen, alongside interventions for hyperbilirubinemia and renal failure. This case underscores the atypical presentation of PTCL with jaundice and the complexities involved in diagnosing and managing such cases, highlighting the need for a thorough and multidisciplinary approach.

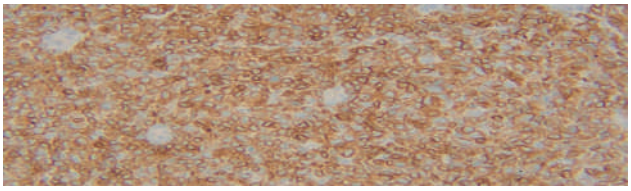

Image 1. Microscopic image of a biopsy taken from the liver (CD3 staining).

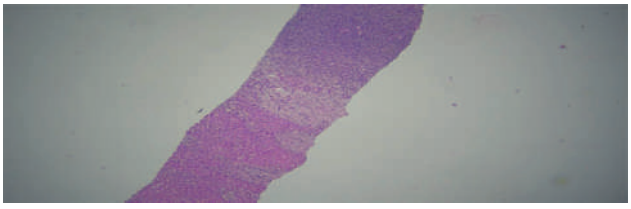

Image 2. Microscopic image of a biopsy taken from the liver (with normal liver tissue) (H&E staining).

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OP19

Two Follicular Dendritic Cell Sarcoma (FDCS) patients treated with Chemoimmunotherapy

Berksoy Sahin, Birol Guvenc

Cukurova University, Medical Faculty Depts of Medical Oncology and Hematology

Here we report 2 patients presenting with bulky lymphadenopathy in the abdominopelvic region. The first patient was a 64 yr old man and a lymph node biopsy from inguinal region revealed a CD23-positive, CD20-negative, CXCL13-positive and Ki67 40% positive follicular dendritic cell sarcoma. The patient received 6 courses of chemotherapy combined with PD-1 MoAb (pembrolizumab. A gemcitabine plus docetaxel regimene (GemDoc) combined with 200 mg pembrolizumab. At the end of 6 courses, PET/CT presented a metabolic CR. We continue the same cheomoimmuno regimene as maintenance treatment. The second patient is a 44 year old man who has an intraabdominal bulky tumor and multiple hepatic metastasis. Core biopsies from liver lesions and intra-abdominal mass revealed FDCS. The patient took the first course of the same regimene of chemoimmunotherapy composed of a GemDoc+pembrolizumab and felt comfortable because of the decrease in tumor sizes. A very rare entity, FDCS has no a standart treatment, yet. We combine a second line sarcoma regimen (GemDoc) with Anti-PD1 Ab, pembrolizumab as induction systemic treatment and followed by a maintenance Pembrolizumab. This chemoimmunotherapy regimen suggest that it will work in FDCS patients who have intermediate PD-L1 expression in tumor cells.

https://doi.org/10.1016/j.htct.2024.04.021

OP20

Neoadjuvant chemoimmunotherapy for a patient with micro-stallete instabile gastric cancer resulted a pathological complete response

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Cukurova University, Medical Faculty Depts of Medical Oncology and Hematology

Here we presented a 44 yr old male patient with an abdominal pain who had a distal gastric adenocarcinoma in his endoscopic biopsy. The pathology reported a chromogranine negative, CK20-positive, PD-L1 5% positive adenocarcinoma with MLH1 (-)and PMS-2(-) MSI status. PET/CT showed enlarged gastric wall (SUVmax 23.99) and enlarged perigastric lymphadenopathy (SUVmax 22.03) and no distant metastasis. The patient received 4 courses of Nivolumab plus FLOT-4 chemoimmunothrapy in neoadjuvant setting. He experienced Grade 2 myelotoxicity and 2 packages of red blood were transfused. Following 4 courses of chemoimmunotherapy a total gasterectomy was performed and the pathology reported no evidence of tumor in the stomach and also perigastric lymphnodes revealing a pathological complete response. There has

been no standart treatment for MSI-high gastric cancer, yet. Very few phase I-II studies wth limited number of patients suggest an immunotherapy-based treatment. Here we report a combination regimen of original FLOT-4 chemotherapy with an PD-L1 Ab (nivolumab) that resulted a pCR in the neoadjuvant setting. Four courses of the same chemotherapy was planned in the adjuvant setting.

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HEMATOLOGY, TRANSFUSION AND CELL THERAPY

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Poster Presentations

Adult Hematology Abstract Categories, Acute Leukemias

PP 01

PETECHIAL RASH ON THE SKIN DUE TO THE USE OF POLYMYXIN B: A RARE CASE REPORT

Emel Akbudak Yerdelen [1], Ayşe Günay [2], Seda Yılmaz [3], Abdulkadir Baştürk [3]

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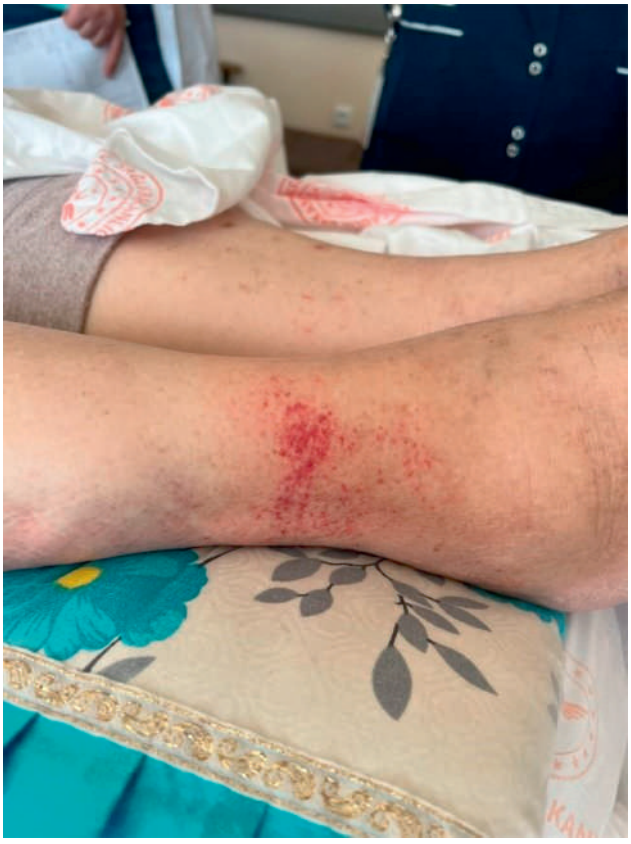
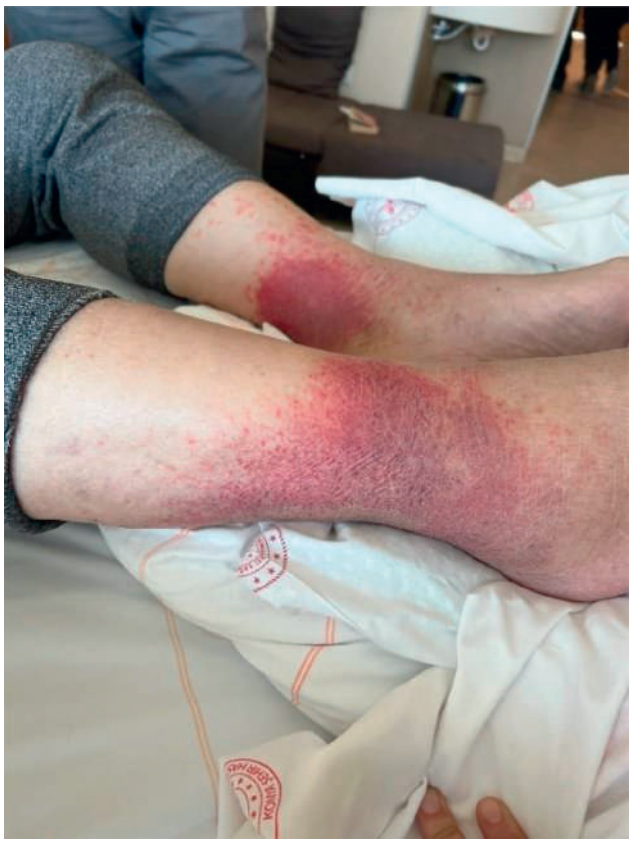
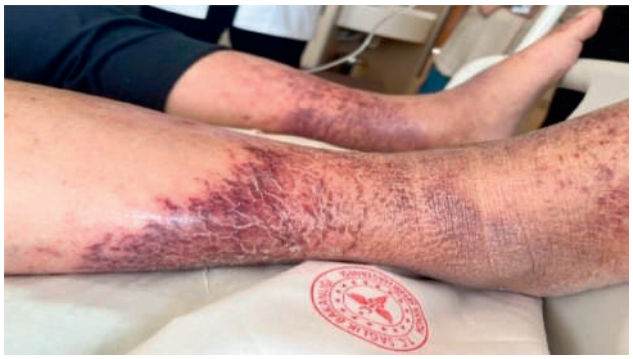
[2] *Konya City Hospital, Clinical Pharmacy Department*
[3] *Konya City Hospital, Hematology Department*

Objective: Polymyxins are bactericidal drugs that bind to lipopolysaccharides (LPS) and phospholipids in the outer cell membrane of gram-negative bacteria (1,2). The most important side effect of intravenous polymyxins is nephrotoxicity, neurotoxicity. Hypersensitivity reactions including rash, itching, urticaria, and fever have also been reported. It can also cause skin hyperpigmentation (3,4,5). We will present the rash thought to have developed due to polymyxin in an elderly patient diagnosed with AML. **Case report:** A 77-year-old male patient diagnosed with AML was admitted to the hospital for a chemotherapy session. After the initial examination, he was hospitalized due to complaints of dyspnea, weakness, and cough. Polymyxin B was started upon recommendation to the patient, who was consulted with the department of chest diseases and infectious diseases regarding his current infection status. Results: During the follow-up, petechial rashes and itching began to occur on both lower legs, starting from the ankle and spreading upwards, and it was noted that the rash and itching occurred after the use of polymyxin B. After the suspected drug was discontinued, the itching gradually decreased, and the rash was observed to become widespread and change color. The patient's rashes were photographed, and his follow-up continued and after comleting the treatment he was discharged. **Conclusion:** In this multidrug-resistant Gram-negative bacteria era, the use of polymyxines has spread. Due to the use of these agents, adverse events such as pruritus, maculapapular rashes, and urticaria may occur (6). Patients should be observed for hypersensitivity reactions related to polymyxin B use, and the cause of these symptoms should be enlightened with the right anamnesis.







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PP 02

ACUTE MYELOID LEUKEMIA DIAGNOSED WITH CUTANEOUS INVOLVEMENT; A RARE CASE

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Objective: Acute myeloid leukemia (AML) is a heterogeneous hematologic malignancy characterized by clonal expansion of myeloid blasts in peripheral blood, bone marrow, and/or other tissues. It is the most common type of acute leukemia in adults with an age-adjusted incidence of 3.6/100,000 in the population (1). Extramedullary leukemia (EM AML), also known as myeloid sarcoma, is a rare manifestation of acute myeloid leukemia and is usually accompanied by bone marrow involvement (2). Leukemia cutis characteristically demonstrates the infiltration of the skin by neoplastic leukocytes(3). While the extramedullary collection of leukemic cells is generally regarded as myeloid sarcoma (previously chloroma/granulocytic sarcoma), leukemia cutis is a generic term to describe specific cutaneous involvement. Although any subtype of leukemia can involve the skin, the most common types seen in clinical practice are chronic lymphocytic leukemia (CLL) and acute myeloid leukemia (AML) with monocytic or myelomonocytic morphology (4). We present a case diagnosed with Extramedullary AML with skin involvement, but without bone marrow involvement. **Case report:** Case: A 60-year-old female patient who presented to the dermatology outpatient clinic in March 2023 due to painful lesions on the trunk for the past 3 months. Physical examination revealed widespread palpable firm nodular lesions on the trunk and back(figüre-1). **Methodology:** The patient underwent a punch biopsy with differential diagnoses including eosinophilic angiomatous hyperplasia, cutaneous metastasis, lupus tumidus panniculitis, T/B-cell lymphoma. CD68, Lysozyme, CD 33, CD16, CD123, TCL-1, TdT were investigated as antibodies.Immunohistochemical examination revealed widespread positivity for lysozyme, CD68, and faint diffuse CD33 in infiltrative cells. CD16, TdT, CD123, TCL-1 were negative. Histopathological diagnosis suggests compatibility with myeloid sarcoma characterized by blast cells with myelomonocytic features, demonstrating infiltration of immature atypical hemolymphoid cells in the skin and subcutaneous biopsy material. The patient was referred to our clinic due to compatibility with myeloid sarcoma and extramedullary myeloid leukemia. Initial tests during admission showed:WBC: 3.6 10^3/μL, HGB: 11.2 g/dL, PLT: 215 10^3/μL, NE: 2.3 10^3/μL, EO: 0.1 10^3/μL, BA: 0.0 10^3/μL, LDH: 297 U/L, with other biochemical values within normal range.In the bone marrow biopsy pathology of the patient revealed increased cellularity in the bone marrow elements, grade 1 increase in reticulin and reticular fibers,positive CD34 in vascular structures, blast cell ratio of 2-3%, mild increase and aggregation of megakaryocytes with CD61, decrease in myeloid series with MPO, and increase in erythroid cell islands with Glycophorin A. Flow cytometry showed 4.6% blast cells. The cytogenetic evaluation of the patient resulted in FLT3 negative, t (15, 17), (q22, q21) PML/RARA negative. The patient received ARA-C+Mitoxantrone (7+3) induction chemotherapy for extramedullary AML and recovered from neutropenia on the 18th day of treatment. Subsequent evaluations showed near-complete improvement (figüre-2). **Results:** After the patient's discharge, BMT was planned. However, the patient was excluded at the center where they applied for BMT **Conclusion:** A variant of extramedullary leukemia is leukemic skin involvement. This condition may or may not be accompanied by bone marrow involvement. The case presented here is a rare instance of Leukemia Cutis without bone marrow involvement. The patient received a myeloid leukemia treatment protocol,

and significant regression was observed in skin lesions after treatment. However, our patient was excluded prior to BMT."

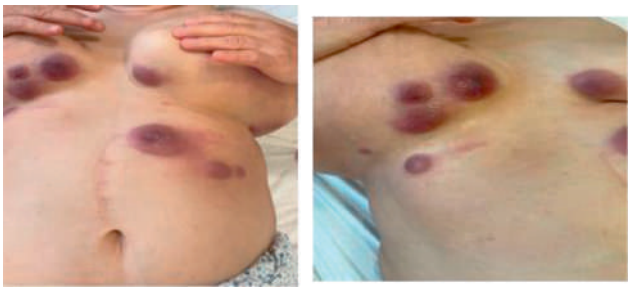

Figure 1: Palpable firm nodular lesions on the trunk and back

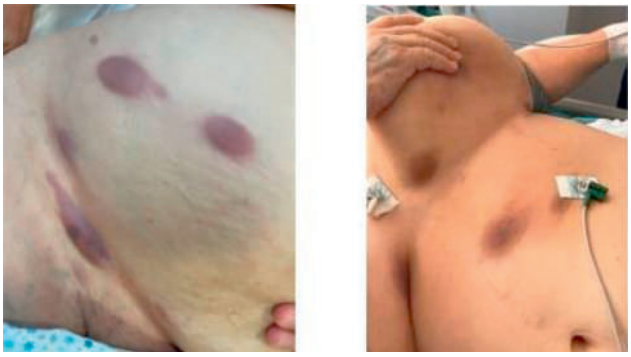

Figure 2: After treatment

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Adult Hematology Abstract Categories, Chronic Leukemias, PP 03

ADRENAL INSUFFICIENCY DETECTED BEFORE TREATMENT IN A PATIENT DIAGNOSED WITH BILATERALLY PRIMARY ADRENAL DIFFUSE LARGE B CELL LYMPHOMA:A CASE REPORT

orhan Ayyildiz [1], sengul baran [1], hazal sahin [1], abdullah karakus [1]

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Case report: INTRODUCTION: Adrenal glands are one of the organs where malignancies frequently metastasize. However, primary malignancies of the adrenal glands are rare. Primary adrenal lymphomas (PAL) account for less than 1% of extranodal lymphomas. It is seen bilaterally in 75% of cases. The most common subtype is diffuse large B-cell lymphoma. **CASE:** A 57-year-old male patient with no known history of disease applied to an external center with complaints of weight loss (13 kg, more than 10% of body weight), tremors, loss of appetite and lower back pain. As a result of the evaluations made at an external center, thorax CT showed bilateral adrenal masses. PET CT was taken with the preliminary diagnosis of malignancy; In the right adrenal gland, approximately 11.6 × 8.1cm (SUVmax: 25.6) and in the left adrenal gland, approximately 10.1 × 7.2cm (SUVmax: 24.4) in size, heterogeneous dense hypermetabolic solid mass sections with necrotic areas were seen and left paraaortic (SUVmax: 11.7) lymph node with dimensions of 1.6 × 1.2 cm and a few mildly-intensely hypermetabolic lymph nodes were observed in the interaortocaval chain. Primary malignancy storage was evaluated in the foreground of dense hypermetabolic mass regions of heterogeneous structure defined in both adrenal glands. After pheochromocytoma was diagnosed, the patient was referred to our clinic after the tru-cut pathology performed on the mass lesions in the right adrenal gland revealed that the morphological and histochemical findings were consistent with diffuse large B-cell lymphoma. The patient's vital signs were stable upon admission. In the hemogram, Hgb: 9.7g/dL Hct: 31.2% MCV: 96 fL Platlet: 126.000 / mm3. In biochemistry, creatinine:1.83mg/dL urea:80 mg/dL Na:139 mmol/L K:4.36 mmol/L Ca:10.2mg/dL uric acid:9.4mg/dL LD:343U/L. There was no sign of adrenal insufficiency other than dehydration. The patient was started on hydration and allopurinol treatments. During follow-up, urea and creatinine levels decreased to normal limits. The patient's basal cortisol was 12.02 μg/dL and ACTH was 83.8ng/L. Low-dose (1μg) ACTH test was performed on the patient, for whom chemotherapy was planned for his primary disease, with the preliminary diagnosis of adrenal insufficiency. The patient's cortisol levels were detected as 8.23-10.35-8.93-9.75 μg/dL at 30-60-90 and 120 minutes, respectively, and hydrocortisone treatment was started with the diagnosis of adrenal insufficiency. During the follow-up of the patient, R-CHOP chemotherapy was started, and since the patient had prednisolone in the chemotherapy course, hydrocortisone was discontinued during chemotherapy and isolated prednisolone treatment was given. Central Nervous System involvement was detected in the cerebrospinal fluid during intrathecal (IT) chemotherapy (Mtx, Dexamethasone, Cytosine Arabinosine). Intrathecal therapy was initially administered 3 times a week and subsequently twice a week. Since no cells were detected in the cytocentrifuge, intrathecal chemotherapy was given 4 times. After 6 cycles of R-CHOP chemotherapy, the patient underwent Autologous peripheral stem cell transplantation because of high risk disease in December 2023. The patient, whose general condition is good during follow-up, is currently being followed in remission under replacement dose hydrocortisone treatment.

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PP 04

A FALSE POSITIVE PET-CT RESULT AFTER TREATMENT OF A PATIENT WITH DIFFUSE B-CELL LARGE CELL LYMPHOMA. A CLINICAL CASE.

Artem Vovchenko [1], Anastasia Galitsyna [2], Andrey Danilenko [1], Natalya Falaleeva [1], Alena Terekhova [1], Daniil Manaenkov [1], Sergei Ivanov [1], Andrey Kaprin [1]

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Objective: The use of 18F-fluorodeoxyglucose positron emission tomography (18F-FDG PET-CT) to determine the initial stage and assess the response to treatment for aggressive lymphomas is considered standard. Evaluation of bone marrow infiltration in PET-CT with 18F-FDG usually makes it possible to distinguish normal regenerating bone marrow after chemotherapy by the characteristic nature of absorption. **Case report:** A 54-year-old patient diagnosed with diffuse large B-cell lymphoma (DLBCL) with lesions of the lymph nodes and bone marrow of the focal form with osteodestruction of the lytic type. Therapy at the A.F. Tsyba MRRC – 6 cycles of R-CHOP, completed in December 2022. **Results:** The PET-CT - 2 cycles is completely normalized. The February 2023, PET-CT showed an increase in the level of metabolism in one of the foci of osteodestruction in the pelvic bones. The biopsy, March 2023, absence of signs of DLBCL. PET-CT, June 2023, the increase of contrast accumulation in previously identified foci. Trepan biopsy in July 2023 – a picture of hematopoiesis foci in the bone marrow, a statement of remission. PET-CT scan in December 2023 confirming the remission of the disease. **Conclusion:** False-positive PET-CT results in the era of rituximab began to be detected with greater frequency, therefore, their assessment and correct interpretation, as well as additional clarification using other available techniques, are necessary in modern clinical practice to choose tactics for further therapy.

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PP 05

A CASE OF RELAPSED REFRACTORY MANTLE CELL LYMPHOMA PRESENTING WITH SKIN LESIONS

asli odabasi giden [1], duzgun ozatli [2], piltan buyukkaya [3], ozgur meletli [3]

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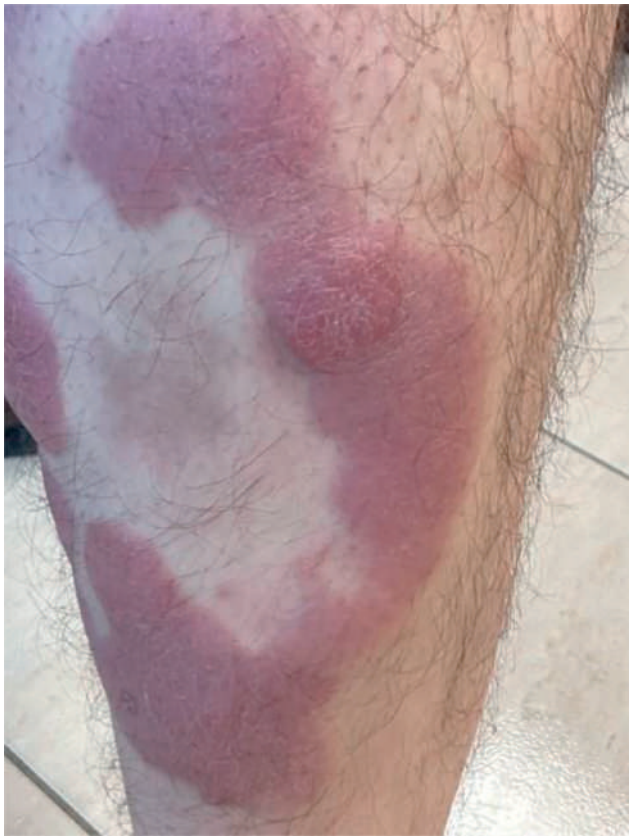
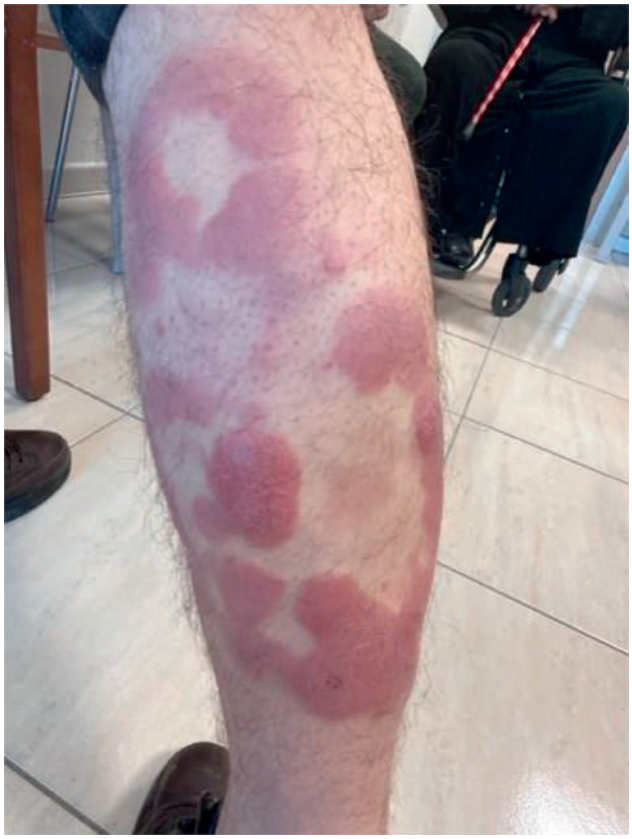
[3] *Samsun Training and Research Hospital*

Objective: Mantle cell lymphoma (MCL) is a rare subtype of B-cell lymphoma characterized by clinical and biological heterogeneity. Lymph nodes are the most commonly involved sites. Other important regions affected by the disease are bone marrow and spleen. However, skin involvement is rare in MCL, and most cases occur due to secondary cutaneous spread of disseminated disease. In this report, a case of relapsed, refractory (R/R) MCL with skin lesions is discussed. **Case report:** A 43-year-old male patient was admitted to our clinic with the complaint of palpable cervical and axillary diffuse lymph nodes. The patient was diagnosed with MCL as a result of lymph node biopsy, and was evaluated as stage 4 and a high-risk disease according to the MIPI scoring system, After chemoimmunotherapy, autologous bone marrow transplantation was performed. The patient who was followed up as a complete response, macular lesions raised from the skin appeared on the lower extremities 4 years after the initial diagnosis (Figure 1), and a skin biopsy was performed; MCL was evaluated as R/R disease. In the immunohistochemical study, CD5, CyclinD1 were positive, Sox-11 was weakly positive, and Ki 67 were evaluated as 100%. The patient was delivered rituximab + ibrutinib (R+I) treatments. After treatment, skin lesions disappeared. After 3 cycles of treatment, the patient underwent an allogeneic bone marrow transplant from his fully compatible sibling. During this period, skin lesions appeared on the trunk, and a skin biopsy was performed; It was evaluated as GVHD (graft versus host disease) and prednol treatment was delivered. The patient, who was evaluated as prednol refractory during the follow-up, was delivered JAK-2 inhibitor and his complaints regressed. The patient was evaluated as a complete metabolic response at the 3rd month post-transplant follow-up. Figure-1 Lower extremity skin involvement Methodology **Conclusion:** MCL is a different type of non-Hodgkin lymphoma that usually affects extranodal sites. The most commonly affected areas are the bone marrow, gastrointestinal tract, and Waldeyer's ring, but the skin is rarely affected. The disease can present with a wide variety of lesions, ranging from petechial erythematous macules to subcutaneous nodules, and very atypical presentations, such as acneiform lesions, have also been reported. Since extremity and trunk involvement is more common, skin involvement can be seen anywhere in the body. Most often, skin lesions are accompanied by systemic symptoms, but a few cases of only cutaneous lesions without systemic involvement have been described. Skin lesions may develop before clinical symptoms appear. In one report describing five cases of MCL involving the skin; 3 patients initially presented with skin lesions but there was evidence of extensive disease at diagnosis. MCL can often involve the skin as a manifestation of disseminated disease and is often associated with blastoid cytological features. Our case also presented with erythematous macular lesions in R/R disease and showed significant improvement in skin lesions and lymphadenopathy with the combination of rituximab + ibrutinib. The poor outcomes seen in MCL patients with TP53 mutations receiving chemoimmunotherapy and second-line Bruton tyrosine kinase inhibitors suggest an urgent need for alternative approaches. There are a number of promising treatments for R/R MCL beyond covalent BTK inhibitors, including CAR T cell therapy and novel immunotherapeutics such as bispecific antibodies. Although most MCL patients have durable responses after chemoimmunotherapy, there is a need to prospectively identify high-risk patient subgroups for whom disease control with standard chemotherapy is poor. Because of the variability of its presentation, which includes nonspecific papules that appear benign, it is important to be aware of the skin manifestations of MCL.





https://doi.org/10.1016/j.htct.2024.04.028

PP 06

A CASE OF RECURRENT DIFFUSE LARGE B CELL NONHODGKIN LYMPHOMA WITH SKIN INVOLVEMENT

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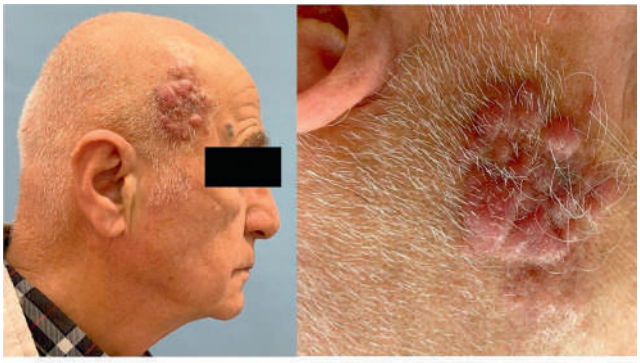
Objective: Diffuse large B-cell lymphoma (DLBCL) is the most common histological subtype of non-Hodgkin lymphoma (NHL). Extra nodal involvement of B-cell lymphoma is usually seen in the gastrointestinal system, followed by the skin. Skin involvement of B-cell lymphomas can be primary or secondary. In this article, we aimed to present a case of DLBCL which did not have skin involvement before but showed recurrence with skin involvement. **Case report:** A 77-year-old male patient presented with a diagnosis of DLBCL based on excisional LAP biopsy in the inguinal region conducted in November 2022. Laboratory tests revealed Hgb 14.3 g/dL, WBC 4.6 × 10^3/μL, plt 191 × 10^3/μL. Following 4 cycles of R-mini CHOP based on the stage 4 DLBCL diagnosis from PET-CT, interim PET-CT showed regression in existing lesions. Methodology: The R-miniCHOP regimen was completed with 8 cycles. In December 2023, a nodular lesion with raised erythematous ground and vascularity in the temporal region was identified (Figure 1). Dermatological evaluation and biopsy revealed infiltration consistent with high-grade B-cell lymphoma. PET-CT detected increased FDG uptake (SUVmax: 10.13) in a soft tissue-density lesion in the right parietal region. Due to age and performance status, the patient was planned for Rituximab-Lenalidomide protocol. Results: Starting from the 1st cycle, lesions showed regression, and by the 2nd week of the 1st cycle, complete disappearance of lesions was observed (Figure-2). Conclusion: In conclusion, while NHL usually recurs in the same sites of involvement, widespread secondary cutaneous involvement has also been reported in the literature. In our patient who did not have primary skin involvement, disease recurrence occurred in the cutaneous region.In cases like ours, the optimal treatment option is salvage chemotherapy followed by autologous stem cell transplantation.



Figüre-1: Infiltrating nodular lesion in the temporal region with vascularisation on a raised erythematous background

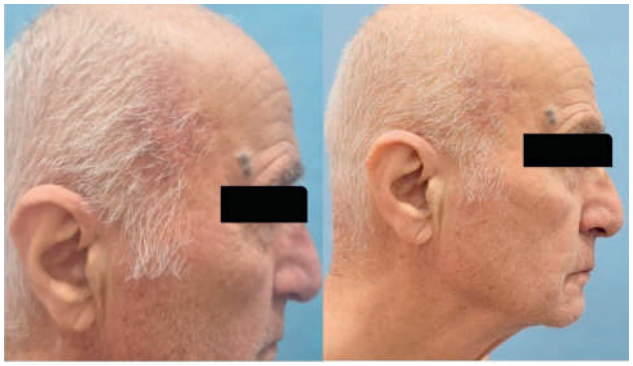


Figure-2: Post-treatment

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PP 07

A RARE CASE OF A RESISTANT EXTRANODAL FOLLICULAR LYMPHOMA WITH PLASMACYTIC DIFFERENTIATION TRANSFORMED IN DIFFUSE LARGE B CELL LYMPHOMA TREATED SUCCESSFULLY WITH AUTOLOGOUS BONE MARROW TRANSPLANTATION.

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[1] *University Clinical Center of Kosovo, Department of Hematology*

Case report: Context: The incidence of extranodal presentation of the disease is less than 10% in follicular lymphomas. Follicular lymphoma with plasmacytic differentiation arising in an extranodal site like subcutaneous tissue and bone is uncommon and its natural history and treatment are poorly described in the literature. **Objective:** Sharing an unusual case report of a resistant extranodal follicular lymphoma with plasmacytic differentiation transformed in Diffuse Large B Cell lymphoma ABC subtype undergoing successful treatment with bone marrow transplantation. **Case report:** In November 2012 a 48-year-old woman was complaining about knee pain during movements. A CT done at that time demonstrated an osteolytic lesion in her right knee in the lateral condyle. The biopsy of the lesion was consistent with the diagnosis of follicular lymphoma with plasmocytic differentiation. Bone marrow aspiration and total body CT were normal without evidence of other tumor masses. The patient underwent radiation therapy and was in perfect condition until late 2017 when she was presented to the hematology consultation because of some subcutaneous masses on her body. PET CT scan revealed several subcutaneous masses with high FDG uptake, one in her right shoulder (3.5 × 1.8 cm), two on her right breast (6.0 × 3.4 cm and 2.1 × 1.3 cm), one on the left side of her neck (1.5 × 0.6 cm), and one on her left inguinal region (4.0 × 2.3 cm). A biopsy of the mass in her inguinal region revealed the diagnosis of follicular lymphoma with plasmacytic differentiation (CD10, CD20, CD138, and MUM1 positive). She was referred to the hematology department for further evaluation and treatment. On admission, the bone marrow aspiration and biopsy showed no malignant diseases. Due to the perfect clinical condition of the patient, we decided to go with Rituximab monotherapy. But after 4 courses no improvement was seen. So, we decided to go with RCVP therapy but still, the disease was refractory, and the PET CT showed other than the subcutaneous masses, a lytic bone lesion in her left talus. We went with 2 RCHOP therapies and 4 RCHOEP plus Bortezomib and only after that, the patient went into total remission. One year later, the masses started to grow in the same location. A second biopsy revealed high-grade follicular lymphoma. We continued with R-lenalidomide but the disease was still refractory. A third biopsy performed showed a high-grade DLBCL ABC subtype. In this condition, we started salvage therapy with 2 cycles of R-BEGEV protocol and referred the patient to a clinic abroad for autologous bone marrow transplantation. The patient underwent total remission after the protocol and autologous bone marrow transplant. She has been in remission since July 2022. **Discussion:** The transformation of follicular lymphoma with plasmacytic differentiation, positive for MUM1 has a high probability according to literature to be resistant to standard therapy and to progress to diffuse large B cell lymphoma ABC subtype. Therefore, the need for aggressive treatment combined with bone marrow transplantation is important.

https://doi.org/10.1016/j.htct.2024.04.030

PP 08

MEDIASTINAL GRAY ZONE LYMPHOMA; SHADES OF GRAY

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Objective: Mediastinal gray zone lymphoma (MGZL) is a rare B cell lymphoma originated from the thymic niche. An incostistency between morphological and immunohistochemical findings is the hallmark of the disease . Both 2022 WHO classification and International Consensus Classification renamed the disease as Mediastinal Gray Zone Lymphoma which excluded non-mediastinal forms. Due to rarity and clinical presentation of mediastinal bulky disease prospective trials for the management of MGZL is limited. Case report: Twenty-nine years old female patient admitted to hospital with dyspnea and night sweats. Basal scans showed an anterior mediastinal mass lesion of 5 × 5 × 6 cm diameter. Tru-cut biopsy of the lesion showed MGZL, cHL -like subtype with immunohistochemically CD 30, CD15, PAX-5 positivity and strong CD20 positive giant cell containing atypical lymphoproliferative mass in a sclerotic background . Background consisted of numerous mature lymphocytes, rare eosinophils, histiocytes and plasma ce **Methodology:** PET-CT showed anterior mediastinal mass of 8,7 X 6,2 cm standing just behind pericardium with a SUVmax of 28,3 . Along with mediastinal mass right prevascular,preparacardiac and anterior diaphragmatic lympadenopaties of maximum length of 2,5 cm and

with a SUVmax ranging between 7,04 and 24,7 were detected. Basal tests showed iron deficiency anemia of hemoglobin 9,8 g/dl and erythrocyte sedimentation rate of 29 mm/hour. LDH was 645 IU/l. Pretherapy echocardiograpy showed pericardial effusion **Results:** Background consisted of numerous mature lymphocytes, rare eosinophils, histiocytes and plasma cells . PET-CT showed anterior mediastinal mass of 8,7 X 6,2 cm standing just behind pericardium with a SUVmax of 28,3 . Along with mediastinal mass right prevascular, preparacardiac and anterior diaphragmatic lympadenopaties of maximum length of 2,5 cm and with a SUVmax ranging between 7,04 and 24,7 were detected. Basal tests showed iron deficiency anemia of hemoglobin 9,8 g/dl . **Conclusion:** Targeted therapies especially PD-1 blockage and anti-CD30 therapies are increasingly filling the gap for the management of GZL s as well as cHL and PMBCL. Brentuximab vedotin is a promising agent for the management of GZLs both in the first line and in the relapsed/ refractory setting.

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PP 09

ISOLATED CENTRAL NERVOUS SYTEM BURKITT'S LYMPHOMA IN ADVANCED AGE: A CASE STUDY

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Objective: Burkitt lymphoma is an aggressive type of B-cell lymphoma that is usually seen in the pediatric and young adult population and characteised with myc gene translocation. This disease manifests itself with rapidly growing abdominal mass and systemic sign and symptoms. However, atypical involvements, such as isolated cranial involvements, face both diagnostic and therapeutic challenges, especially in older age groups. Although isolated cranial involvement of Burkitt's lymphoma is rare in older patients, this case report emphasizes the challenges in clinical practice. **Case report:** A 67-year-old female patient was taken with complaints of headache and vomiting in June 2022. An MRI scan revealed a mass measuring 3.3 × 2.8 × 1.5 cm in the left temporal region. Upon this finding, the patient was referred to the neurosurgery department and the mass was surgically removed. As a result of the pathological examination resulting from the operation, CD10, CD20 were diffusely positive; BCL2 negative; BCL6 positive; C-MYC 70% positive; Kİ67 is 100% positive and confirms Burkitt's Lymphoma. In the PET-CT scan performed for the staging of the patient, reticular dense growths and irregular growth FDG uptakes in ground glass density areas were observed in the medial posterobasal segment of the lower lobe of two lungs and in the anterior segment of the upper lobe of the left lung. In the mediastinal area, increased degrees of FDG uptake were detected in bilateral lower paratracheal and subcarinal lymph nodes. These findings were evaluated as a potential infectious event. While there were no findings in hemogram and biochemical pathological tests, HbsAg positivity was detected but no active disease was found.Prophylactic intrathecal(IT) treatmentwas also recommended for the disease, which started to systemic chemotherapy, but IT chemotherapy was rejected.. In subsequent MRI examinations, the defect formed after craniotomy in the left temporofrontoparietal region and fluid collection in the calvarium were observed, while no residue or recurrence was observed in the operation area.However, a lesion measuring 2 × 3 cm in size was detected in the left parietal at the vertex level, which was primarily considered a fibroma and showed marked hypointenses and heterogeneous contrast enhancement in all sections. In the evaluation PET-CT performed after four cycles of the R-HYPERCVAD regimen, a mild increase in metabolic activity was observed in the mediastinal lymph nodes, but this was consistent with inflammatory processes, and no signs of recurrence or metastasis were found in other parts of the body. Despite these findings, which were accepted as a response to treatment, the planned OKIT treatment was not accepted by the patient and their relatives. After completing the seventh course of treatment, the patient presented to the emergency room with altered consciousness and recurrent headaches. Antieodema treatment was applied to the patient who was diagnosed with brain edema, but the recommended advanced chemotherapy and full cranial radiotherapy were rejected. In December 2023, the patient was re-admitted with symptoms of brain edema and shingles zoster infection was observed, and the patient died after his condition worsened despite symptomatic treatment. **Conclusion:** This case report highlights the rarity of advanced age Burkitt lymphoma with isolated cranial involvement and the diagnostic and therapeutic difficulties of this condition. Our patient exhibited atypical involvement of an aggressive B-cell lymphoma that usually occurs in childhood and young adults and is characterized by myc gene translocation. The disease, which usually manifests itself with an abdominal mass and systemic symptoms, is rare to show isolated cranial involvement, and this requires us to re-evaluate the diagnosis and treatment strategies in our clinical practice. In this case, although the patient's symptoms and radiological findings initially suggested a typical brain tumor, pathological examination confirmed the diagnosis of Burkitt's lymphoma. During the patient's treatment process, the importance of systemic chemotherapy and prophylactic intrathecal treatment became evident. However, rejection of various treatment options by patients and their relatives may negatively affect the effectiveness of the treatment and patient survival. This case highlights the rarity of Burkitt lymphoma with isolated cranial involvement in older age patients and the challenges and important lessons encountered in the diagnosis and treatment of these atypical presentations.

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Adult Hematology Abstract Categories, Myeloma, PP 10

Real-Life Experience with Pomalidomide plus Dexamethasone in Patients with Multiple Myeloma: A Single Center Retrospective Study

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Objective: Multiple myeloma (MM) is a heterogeneous disease with the uncontrolled clonal proliferation of plasma cells, accounting for approximately 10% of all hematologic cancers . Hence without curative therapy, the treatment aims to improve overall survival.Pomalidomide (POM) is a third-generation immunomodulatory agentPomalidomide can be administered with dexamethasone or in combination with proteasome inhibitors (bortezomib) and monoclonal antibodies (isatuximab, daratumumab). We retrospectively analysed all patients treated with pomalidomide at our centre between 2017 and 2023. **Methodology:** All patients who had received or were currently receiving treatment with pomalidomide at Ege University Hematology Outpatient Clinic between January 2017 and April 2023 were included. To be included in response assessments, patients had to have measurable disease as defined by International Myeloma Working Group (IMWG) guidelines (Kumar et al, 2016) and have completed at least one cycle of pomalidomide with repeat biomarkers performed. Treatment consisted of 28-day cycles of pomalidomide (taken daily on days 1–21) plus dexamethasone (on days 1, 8, 15 and 22), plus or minus a third agent. **Results:** A total of 25 patients who received treatment with pomalidomide were identified. Of these, 24 were able to be included in response analyses. Of the remaining 1 patient for whom response could not be assessed,had an anaphylactoid reaction with pomalidomide and did not complete a single cycle of treatment. The analysis includes a total of 23 patients with RRMM, 1 patient with newly diagnosed multipl myeloma who had central nervous system involvement at diagnosis. 23 patients treated with POM-DEX in the lines of therapy subsequent to the second (third to seventh) line. Median patient age at diagnosis was 55 years (range 42–82), 7 (28%) patients were 65 or older than 65 years old. 13 patients were male (54,25%) and 11 were female (45,85%). 6 (25%) patients had International Staging System (ISS) stage I, 5 (20,8%) had stage II, 11 (45,8%) stage III myeloma, respectively (2 patients had not adjusted) stage III myeloma. 79,2 % (n=19)of patients had IgG, 4,2% (n=1) had IgD, 79,2 % (n=19) had kappa and 20,8 % (n=5) had lambda subtype myeloma. Six patients (25 %) had extramedullary disease and 18 (75 %)had lytic bone lesions at diagnosis. Moreover, 12 (%50)patients had received a previous autologous stem cell transplant (single or double). 1 patient had autologous stem cell transplant after pomalidomide therapy. On data cut off (1 August 2023), median survival from initial diagnosis was not reached .Nearly all patients had received at least two previous lines of therapyand, as per guideline, had been exposed both to lenalidomide and bortezomib. Efficacy In a total of 24 patients, the treatment response rate (ORR), including all patients with a partial response or better, was 41.7%. A total of 10 patients gained a partial response (3) or a complete response (7). Median progression-free survival (PFS) was 18,95±5,18 months. Median (IQR) treatment duration was 8 (2-47) months. 2 years OS had adjusted as % 35,4 ±12,8. The most common adverse events were hematologic toxic effects, such as neutropenia (11 patients), anemia (3), thrombocytopenia (1); we also described gastrointestinal symptoms such as diarrhea, infections or sepsis, pneumonia. **Conclusion:** Multiple myeloma (MM) is a heterogeneous disease with the uncontrolled clonal proliferation of plasma cells, accounting for approximately 10% of all hematologic cancers. Prognosis of patients after a second relapse remains poor, and the treatment is still challenging. According to the phase three study MM-003, pomalidomide in combination with dexamethasone (DEX) was approved as a subsequent line of therapy to the second one by the US Food and Drug Administration and the European Medicines Agency (EMA) in 2013, respectively, showing efficacy in patients with RRMM and previously exposed to both bortezomib and lenalidomide . In this study, we analyzed the efficacy of oral pomalidomide plus dexamethasone regimen in our patients that received more than one cycle of POM-DEX therapy. Although our patients received POM-DEX at an advanced stage of disease the findings from our real-life experience indicate that Poma-D is a safe and well-tolerated regimen with acceptable toxicity. The ORR reported in our study was 41.7% and is better than previous studies (33% in MM-002, 31% in Nimbus, and 32.6% in Stratus). The PFS observed in our cases of 18,95 ±5,18 months is also quite favorably comparable with that of previously mentioned trials (which described median results of 4.0–4.6 months). Nowadays triplet regimens are widely considered the standard of care in myeloma. Though the efficacy of POM-DEX, should not be underestimated for all those patients in which three-drug regimens are not indicated (because they are frail or very elderly, or with significant adverse effects related to proteasome inhibitors).

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PP 11

A COMPILATION OF ATYPICAL PLASMA CELL DISCRASIA CASES

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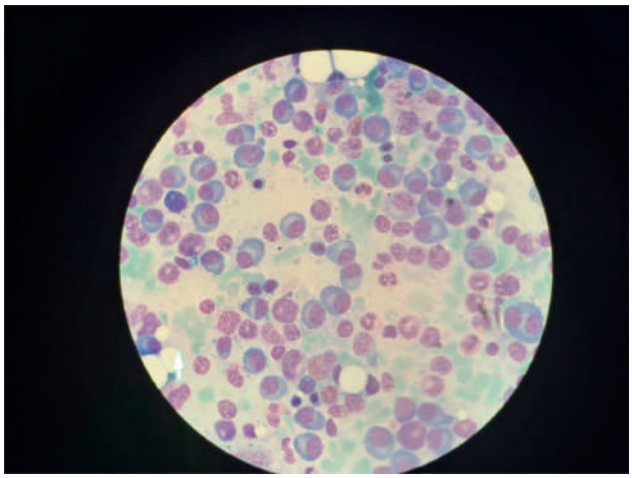
[1] *van yüzüncü yıl üniveristesi dursun odabaşı tıp merkezi*

Objective: CLINICAL DIAGNOSIS, APPROACH AND MANAGEMENT OF PLASMA CELL DISEASES OF ATYPICAL AGE AND ATYPICAL LOCATION Case report: OUR FIRST CASE: A 66-YEAR-OLD FEMALE PATIENT APPLIED WITH ABDOMINAL PAIN. HGB: 6,6 AND ENDOSCOPY IS DONE. 8 CMDIFFUSE THICKENING WAS DETECTED IN THE STOMACH. A BIOPSY IS TAKEN. THE RESULT IS STOMACH PLASMOCYTOMA. KT STARTED. **SECOND CASE:** A 32-YEAR-OLD FEMALE PATIENT ADMITS WITH WEIGHT LOSS, DYSPNEA AND LEUKOCYTOSIS. IT IS PLASMA CELL LEUKEMIA. THE KIT IS BEING MADE.LATEST CASE: A PATIENT WHO PRESENT WITH DIPLEGIA IN THE

MEDULLA SPINALIST HAS A PLASMOCYTOMA IN THE MEDULLA SPINALIST. HE TREATMENT Methodology



https://doi.org/10.1016/j.htct.2024.04.034

PP 12

A SUCCESSFUL CASE OF PRIMARY PLASMA CELL LEUKEMIA TREATED WITH DARATUMUMAB-BASED THERAPY FOLLOWED BY AUTOLOGOUS BONE MARROW TRANSPLANTATION

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Case report: Context: Primary plasma cell leukemia is a rare and aggressive variant of plasma cell neoplasm, and its diagnosis is based on the percentage (≥ 20%) of circulating plasma cells in the peripheral blood. It accounts for about 0.5-2% of all plasma cell dyscrasias and the median age of presentation is 55 years. In young adults, it is even rarer, and only a few isolated case reports have been reported. **Objective:** In this case, we are representing an aggressive form of plasma cell leukemia that was successfully treated with daratumumab therapy and autologous bone marrow transplantation. **Case report:** In October 2021 a 38-year-old man was admitted to the emergency room with extreme sweating and fatigue, problems with urination, and pain in the lower abdomen. The complete blood count showed anemia (Hb=8.0 g/dl) and biochemistry showed high levels of urea (26.55 mmol/l) and creatinine (1142 μmol/l). He was admitted to the nephrology department when he started immediate dialysis. Abdominal ultrasound showed splenomegaly (180mm). Because of anemia and splenomegaly, a hematologist consultation was requested. Immune electrophoresis revealed low levels of IgG, IgM, IgA, and kappa chains (4.9 mg/l) and normal levels of lambda chains (26.3 mg/l). Lambda/kappa ratio was 5.36. The sedimentation rate was 150 mm/h, there were no osteolytic bone lesions according to standard X-rays and calcium levels were normal. Peripheral blood smear showed plasma cells up to 22 percent. Bone marrow aspiration and biopsy showed full infiltration with plasma cells with lambda expression that were CD56 negative and CD38 and CD138 positive. The diagnosis of plasma cell leukemia was made, and he was transferred to the hematology union for further therapy. We started chemotherapy with the VTD PACE protocol. After 2 cycles bone marrow aspiration was performed and still the presence of more than 90% of plasma cells was detected. The patient was still in dialysis and in critical condition with a Lambda/kappa ratio of 100 (1200/11.9 mg/l). Because the disease was refractory, he was referred to a clinic outside of Kosovo for further therapy and bone marrow transplantation. He received triple therapy with Daratumumab, Thalidomide, and Bortezomib. After two cycles he underwent remission, and an Autologous bone marrow transplant was successful. The patient has been in remission since July 2022. He is taking subcutaneous Bortezomib every two weeks and is no longer on dialysis. **Discussion:** In this case, the patient demonstrated an aggressive clinical course with typical features of plasma cell leukemia i.e. severe anemia, renal failure, lack of bone involvement, more than 20% plasma cell on peripheral blood smear, splenomegaly and bone marrow infiltration of plasma cells negative for CD56. Daratumumab therapy followed by autologous bone marrow transplantation was successful and was the best treatment option in this case.

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Adult Hematology Abstract Categories, Platelet Diseases

PP 13

DIFFERENTIAL DIAGNOSIS OF SPONTANEOUS LESIONS ON THE SKIN AND FACTITIAL DERMATITIS IN A PATIENT DIAGNOSED WITH ITP: A CASE REPORT

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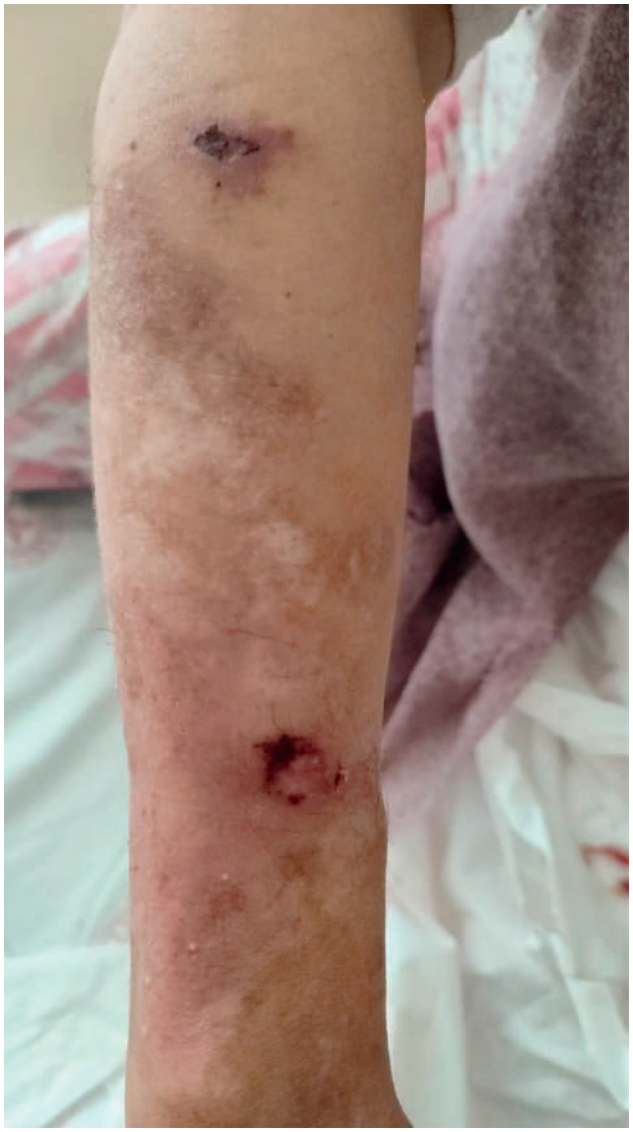
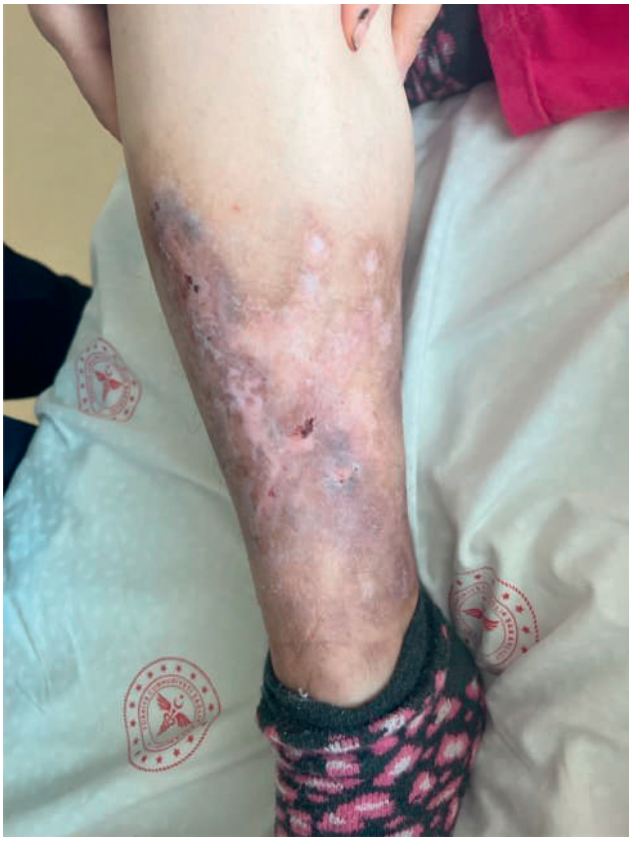
Objective: Dermatitis artifacta is a condition in which skin lesions are produced solely by the patient's own actions. This often occurs as a result or manifestation of a psychological problem (1,2). In immune thrombotic purpura (ITP), a condition characterized by a low level of platelets, petechial rashes usually occur. Patients usually seek help for these skin manifestations (3). **Case report:** A 40-year-old female patient was being followed up in the hematology clinic due to ITP. White blood count was $5.59 \times 10\text{^}3/\mu$L, hemoglobin value was 10.3 g/dL, platelet count was $21 \times 10\text{^}3/\mu$L. Peripheral smear: He was hospitalized with complaints of a low platelet count and bleeding from lesions on his arms and legs. The patient had irregularly shaped lesions and bleeding areas on both

forearms and legs. Methodology: The patient was hospitalized due to hematological ITP, but these skin lesions were not compatible with ITP. A psychiatrist was consulted as the patient attempted to draw attention to her lesions during daily visits. She was diagnosed with factitial dermatitis by psychiatry. **Results:** Later, upon the development of symptoms such as epistaxis and hemoptysis associated with ITP, the patient's attention was directed to the newly developing symptoms, and the effort to create lesions decreased and the existing lesions were observed to regress. **Conclusion:** An autoantibody-mediated thrombocytopenic condition called immune thrombocytopenic purpura (ITP) causes an accelerated loss of platelets and presents with petechial rashes (4). On the other hand, dermatitis artifacta is a psychological problem that is characterized by self-induced skin lesions and should be examined accordingly (5). Clinicians should always be aware that skin lesions in ITP patients may be oriented toward psychological disorders.





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Adult Hematology Abstract Categories, Stem Cell Transplant

PP 14

Mesenchymal stem cell supported hematopoietic stem cell transplantation from a mismatched unrelated donor to children with Fanconi anaemia: A successful technique

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Case report: Over the past 20 years, hematopoietic stem cell transplantation (HSCT) outcomes in patients with Fanconi Anaemia (FA) have improved dramatically. It is well established that the addition of mesenchymal stem cells (MSCs) to HSCT regimens in aplastic anaemias has positive effects on transplantation results. Considering these results, we present the transplantation procedure successfully performed on a patient with FA, supported by the MSC infusion from a 9/10 HLA-matched unrelated donor. **Case:** An 11-year-old girl was admitted with multiple congenital anomalies and pancytopenia. DEB test was positive, compound heterozygous FANCA mutation was detected. A diagnosis of Fanconi anemia (FA)

was made. We continued administering oral prednisolone and danazol without transfusion for 3 years. The need for platelet transfusion guided us to schedule HSCT. Given the absence of any matched family donor in her case, a 9/10 HLA matched donor was found from the national stem cell bank. Reduced-intensity conditioning regimen (Fludarabine, 30 mg/m^2/day, days -7 to -3; cyclophosphamide; CY, 10 mg/kg/day, days -6 to -3) and serotherapy (ATG, 10 mg/kg/day, days -4 to -2) were performed. Mesenchymal stem cells (MSC) infusion (1×10^6/kg) was administered on days -1 and +7, along with a dose of 6.2×10^6/kg peripheral stem cells. Tacrolimus, methotrexate, and prednisolone (1 mg/kg/day, 28 days) were administered as graft versus host disease (GVHD) prophylaxis. Neutrophil engraftment (2020/mm^3) occurred on the 9th day, platelet engraftment (135000/mm^3) occurred on the 12th day. She had CMV reactivation in the 3rd month of HSCT. Antiviral treatment for CMV infection was carried out for 3 weeks. On day +100, a steroid was added due to grade II skin acute GVHD (aGVHD). Following its tapering off after 15 days, steroid administration was stopped. The patient achieved complete chimerism, allowing the discontinuation of immunosuppressive treatments in the first year itself. **Discussion:** MRD and MUD transplants yield the highest success rate in patients with FA. However, the results of HSCT from an alternative donor are still unsatisfactory. MSCs are responsible for immune regulation, tissue repair and regeneration, homing, and support of the hematopoietic system. It has been reported that infusion of MSCs can reduce the development of aGVHD by 3-fold and improve the OS of patients after allogeneic HSCT in comparison to standard prophylaxis. The addition of MSC to the conditioning regimens for MMUD transplants in patients with FA has been proven advantageous due to its graft-supporting, immunosuppressive, and immunomodulatory properties. However, large-scale randomised controlled trials are yet required to back these benefits.

Keywords: *Fanconi anemia, HSCT, mesenchymal stem cell*

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Adult Hematology Abstract Categories, Transfusion Medicine and Apheresis

PP 15

GRANULOCYTE TRANSFUSION ACCELERATES RECOVERY FROM NEUTROPENIA IN PATIENTS WITH HEMATOLOGIC MALIGNANCIES

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Objective: Neutropenia is the most common and serious consequence of myelosuppressive chemotherapy in patients with hematologic malignancies.Granulocyte transfusions can restore granulocyte counts and thus theoretically reduce the risk of infection in such patients.In our study, we aimed to demonstrate the efficacy of granulocyte transfusion in neutropenic patients with hematologic malignancy despite recombinant myeloid growth factor therapy. **Methodology:** In this retrospective study, 72 patients who were treated in our hematology clinic between 2016 and 2022 and who met the criteria of our study were included. Demographic data, malignancy subtypes, chemotherapy regimens, number of neutropenic days, clinical outcome before and after granulocyte transfusion, and neutrophil count changes in blood parameters were analyzed.In the study, p-values less than 0.05 were considered significant. The analyses were analyzed with the SPSS 25.0 program. **Results:** In our study, 56.9% of the patients were male, the most common diagnosis was AML with 65.3% and 91.7% Gram-/+ was the most common type of treatment. It was observed that 62.5% of the patients recovered from neutropenia after granulocyte transfusion and 37.5% did not recover or exited.It was observed that patients who were neutropenic before chemotherapy were more likely to recover from neutropenia after granulocyte transfusion (p=0.01) and had lower rates of recovery from neutropenia (p=0.04). **Conclusion:** Considering the present results, granulocyte transfusion seems to accelerate the recovery from neutropenia in the sample we analyzed. In addition, the diagnosis of the patient, the type of chemotherapy received, and the time of granulocyte transfusion were evaluated as factors affecting the results. However, in light of the data obtained, we believe that prospective studies with a larger number of patients should be conducted to evaluate the consistency of our results.

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Adult Hematology Abstract Categories, Other Diseases

PP 16

CARCINOMA EX PLEOMORPHIC ADENOMA: DIAGNOSTIC CHALLENGE AND TREATMENT PROTOCOL

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Objective: Carcinoma ex pleomorphic adenoma CXPA, a rare epithelial malignancy arising from a primary or recurrent benign pleomorphic adenoma, accounts for 11.% of all malignant salivary gland neoplasms. It is difficult to diagnose preoperatively. often poses a diagnostic challenge to clinicians and pathologists Treatment involves an ablative surgical procedure with neck dissection followed by radiotherapy. We aim to investigate the impact of postoperative radiotherapy on improving disease-free survival. **Case report:** A 39-year-old Libyan male presented with painless swelling near the angle of the right mandible four months ago. FNA Cytology showed a benign pleomorphic adenoma. A total parotidectomy with VII CN preservation was done in September 2022. The histopathological features were consistent with carcinoma EX pleomorphic adenoma, a widely invasive salivary duct

carcinoma grade III with < 1mm(close)margins staged PT1 N0 M0. The immunohistochemistry revealed the negative expression of ER and PR assays. **Methodology:** In December 2022, he received adjuvant radiation to the tumor bed (66 GY) in 33 fractions over 6 weeks based on the VMAT technique. 12-month follow-up, the patient showed no evidence of local or regional disease recurrence or distant metastasis. **Results:** Radical surgery, followed by adjuvant radiotherapy, should be considered the standard of care for a patient, with significant improvement in 5-year locoregional control. and in general, salivary gland neoplasms respond poorly to chemotherapy and are currently indicated only for palliative sitting. More prospective data is needed to establish a role for hormonal therapy and molecularly targeted therapies. **Conclusion:** CXPA is an uncommonly aggressive malignancy that, if associated with regional metastasis, invariably leads to mortality. Total resection of the tumor, followed by adjuvant radiotherapy, should be considered the standard of care for a patient with significantly improved 5-year locoregional control. Early and prompt diagnosis, followed by aggressive surgical intervention and adjuvant radiotherapy for patients with carcinoma ex pleomorphic adenoma, can enhance their survival rates.

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PP 17

AGGRESSIVE SALVAGE THERAPY OF OLFACTORY NEUROBLASTOMA CASE REPORT EXPERIENCE

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Objective: Olfactory neuroblastoma (ONB) is a rare malignant neoplasm arising from the olfactory neuroepithelium. It accounts for 3–5% of all nasal and Sinonasal malignancies, with an incidence of approximately 0.4 cases per million. A complete surgical resection of tumor followed by a full course of radiotherapy, is considered the treatment modality of choice for most ONBs. We aim to assess the impact of aggressive salvage radiotherapy in olfactory neuroblastoma on local recurrence and overall survival. **Case report:** A 41-year-old Libyan female presented in 2020 with a mass in the right nasal cavity that caused persistent nasal congestion with intermittent epistaxis over one year ago. Histopathological characteristics and immunohistochemical findings of the biopsy confirmed an olfactory neuroblastoma grade III, Radiological imaging evaluation revealed group B stage, and an incomplete excision was done, followed by radical radiotherapy with 70 GY in 35 fractions over 5 weeks to the residual disease. Methodology: Imaging follow-up for three years up to February 2024 shows no signs of local recurrence or distant metastasis. **Results:** Although multi-disciplinary care is required, surgical treatment alone is effective for low-grade tumors with free margins. Adjuvant radiation is used for low-grade tumors with close margins, residual disease, or recurrent disease, and for all high-grade cancers. The poor prognosis associated with high-grade tumors may also mandate the addition of chemotherapy. Because recurrence can occur after 5 or even 10 years, aggressive management and long-term follow-up are mandatory. **Conclusion:** Multimodal therapy, including post-operative radiotherapy of high-grade incompletely resected ONB, with precise treatment planning based on CT simulation, could achieve an excellent local control rate with acceptable toxicity and reasonable overall survival for patients with ONB. Still, the rarity of the disease makes it difficult to draw definitive conclusions about the role of systemic treatment in induction and concomitant settings.

https://doi.org/10.1016/j.htct.2024.04.040

PP 18

SEVERE CONGENİTAL NEUTROPENİA WİTH GLUCOSE-6-PHOSPHATASE CATALYTİC SUBUNİT 3 (G6PC3) DEFİCENCY OR DURSUN SYNDROME DİAGNOSED AT ADULTHOOD

Yunus CATMA [1], Elif Sakci [1], Tugba Kalayci [2], Sevgi Kalayoglu Besisik [1]

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[2] *Department of Internal Medicine, Division of Medical Genetics, Istanbul Medical Faculty, Istanbul University, Turkey*

Case report: Severe congenital neutropenia is rare and usually diagnosed at childhood. G6PC3 deficiency emerge by mutation in glucose metabolism controlling genes as a syndromic variant. We here present a young adult case with unexplained neutropenia after kidney transplantation for FMF related AA amyloidosis. He had facial dismorphism, growth retardation, and atrial septal defect. Parents were relatives and he had recurrent infection history. Genetic screening revealed G6PC3 gene mutation in patient.

https://doi.org/10.1016/j.htct.2024.04.041

PP 19

THE RARITY OF PRIMARY CUTANEOUS MALIGNANT MELANOMA OF THE BREAST REQUIRES SPECIAL CONSIDERATION IN THE MANAGEMENT.

Ebtihaj Hassan [1], Suad Enaami [1], Jalal Eltabib [1]

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Objective: Cutaneous malignant melanoma of the breast is a rare tumor, accounting for less than 5% of all malignant melanomas, Surgical resection is the commonly adopted treatment method for malignant melanoma, supplemented by chemotherapy, radiotherapy, and immunotherapy treatments, resulting in a comprehensive treatment strategy. We aim to assess the efficacy of adjuvant radiotherapy in managing cutaneous

malignant melanoma of the breast in long-term local and regional control. **Case report:** A 65-year-old Libyan woman was diagnosed with stage III primary cutaneous malignant melanoma of the breast in 2021. She presented with a progressive painless mass of preexisting nevus, which is located on the skin of the upper inner quadrant of her left breast post-wide local excision without ipsilateral regional lymph node sampling. A month later, a regional ipsilateral axillary LN recurrence occurred. Modified radical mastectomy and axillary LN dissection were done. **Methodology:** subsequently, six cycles of chemotherapy were received, followed by 40 GY in 15 fractions of adjuvant radiotherapy to the left chest wall, ipsilateral axilla, and supraclavicular LNs. In November 2022, lung metastasis was identified, and immunotherapy was advised, Subsequent imaging up to January 2024 indicated no local or regional recurrences and a complete disappearance of lung metastasis. **Results:** The rarity of cutaneous malignant melanomas of the breast has made it difficult to evaluate a life-threatening disease in which local recurrence and regional or distant metastasis may develop after surgical removal of MM, which is common. Wide local excision and prophylactic lymphadenectomy, including radical mastectomy, gave the best long-term local and regional control. Internal mammary node Dissections are not indicated; radiotherapy decreases locoregional failure from 30-50 % to 10–20%. **Conclusion:** Given the notable local, regional recurrence, and distal metastasis rate, local radiotherapy and immune checkpoint inhibitors monotherapy could serve as potent adjuvant treatment in metastatic cutaneous breast malignant melanoma.

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PP 20

EVALUATION OF THE ASSOCIATION OF TUMOR BIOMARKERS WITH CHILDHOOD CANCERS

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Objective: We aimed to investigate the indications for Carbohydrate antigen 19-9 (CA 19-9), carbohydrate antigen 125 (CA-125), carbohydrate antigen 15-3 (CA15-3) and carcinoembryogenic antigen (CEA) tumor biomarkers, less commonly used in children, and their association with patients diagnosed with childhood cancers. **Methodology:** The study aimed to include patients aged 0-18 who had CA 19-9, CA-125, CA 15-3 and CEA tumor biomarker assessments at Adana City Training and Research Hospital (ACTRH) between 01.11.2022 and 01.11.2023. CA 19-9, CA-125, CA 15-3 and CEA values were recorded from routinely collected serum/blood samples of the patients. The relationship between tumor biomarkers and patients diagnosed with childhood cancers was evaluated. **Results:** The study included 211 patients. Out of 211 patients, 145 (68.7%) were female, and 66 (31.3%) were male. Malignancy was detected in 35 patients (16.6%). There was no statistically significant relationship observed between CA 15-3, CA 19-9, and CEA positivity and the detection of malignancy. The respective p-values were found to be (p=0.711, p= 0.533, p=0.573). A statistically significant relationship was observed between CA-125 positivity and the detection of malignancy (p=0.002). **Conclusion:** Tumor markers alone are not sufficient for making a definitive diagnosis or determining treatment decisions. However further comprehensive studies are needed for detection of association conventional tumor markers and childhood cancers.

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PP 21

THE EFFECT OF FERRITIN LEVEL ON RESPIRATORY FUNCTIONS IN PATIENTS WITH B-THALASSEMIA MAJOR

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Objective: β-thalassemia major (β-TM) is an autosomal recessive disorder caused by mutations in the β-globin gene of hemoglobin. The disease is characterized by splenomegaly due to ineffective erythropoiesis, iron accumulation signs in tissues as a result of increased iron absorption, bone expansion due to increased erythropoietic activity, and decreased tissue oxygenation. One of the effected organ can be the lungs due to excessive iron deposition in these patients. The current study aimed to investigate the effect of serum ferritin level, which is known as a marker of iron accumulation in tissues, on pulmonary function tests (PFT) in patients with β-TM. **Methodology:** Patients aged ≥6 years who were regularly followed in the pediatric hematology section of Mersin City Research and Training Hospital with a diagnosis of β-TM were included. All patients received regular blood transfusion and iron chelation therapy. Study participants underwent PFT prior to blood transfusion in the pediatric pulmonology section. **Results:** A total of 43 patients with β-TM were studied. Included patients were divided into two groups according to the mean annual ferritin level; low ferritin group if below 2000 ml/ng and high ferritin group if above 2000 ml/ng. The low ferritin group was consisted of 19 patients and the high ferritin group was consisted of 24 patients. The characteristics of these two groups are shown in Table 1. There were no statistical significance in age, gender, body mass index, age at diagnosis, mean annual hemoglobin, splenectomy, cardiac involvement and oxygen saturation among both groups, but the number of annual transfusion was significantly higher in the high ferritin group than lower ferritin group. When PFT parameters of both groups were compared, FVC (forced vital capacity) was statistically lower in the high ferritin group compared to the low ferritin group. Other parameters

included FEV_1 (forced expiratory volume in 1 second), FEV_1/FVC ratio, PEF (peak expiratory flow) and FEF_{25-75} (forced expiratory flow between 25% and 75% of vital capacity) were similar among groups. (Table 2) **Conclusion:** Patients with β-TM may accumulate iron in the interstitial area of the lungs which can lead fibrosis and impaired lung function over time. There are several studies investigated lung dysfunction and its etiology in these patients. Although the results of the studies are varied, the majority of them reported a restrictive pattern of respiratory dysfunction in thalassemia patients. Additionally, some studies showed the presence of mild or moderate obstruction in small airways and decrease in diffusion capacity with the increase of alveolar-capillary membrane thickness at advanced ages.In the present study, we found that patients with β-TM who had high ferritin level showed restrictive type lung function compared to those with low ferritin level. There were no difference among the groups in obstructive parameters (i.e. FEV1, FEV1/FVC, FEF25-75) of PFT. In the literature, studies investigating PFT in patients with high ferritin levels had variable results, impaired or no change, in pulmonary status. In conclusion, loss of respiratory function and impaired tissue oxygenation in patients with β-TM may develop over time due to iron deposition in the interstitial area. PFT assessment of these patients is essential and recommended for the detection of early lung disease. Routine PFT follow in patients with β-TM of high ferritin values is highly important.

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Nursing, Blood Transfusion, PP 22

UNEARTH WRONG BLOOD TRANSFUSION BY PURSUING MIXED FIELD REACTION

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Case report: ABO-incompatible blood transfusions are potentially life-threatening. The common cause is skipping the final bedside check. Potential intensive and emergent transfusions have the risk of a blood component-patient matching hitch. A 58-year-old bleeding patient with anesthesia received the 4th RBC unit. Pretransfusion tests showed hemolysis in a mixed field. The returned empty bag confirmed the wrong blood group RBC transfusion. The blood bank and hemovigilance intervened; the incident was recorded

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PP 23

Challenging the Presentation Paradigm in DLBCL: A Case Study of Extraordinary Disease Distribution

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This case study examines a 55-year-old male without previously known comorbidities, who was evaluated due to palpable lymph nodes identified incidentally in the neck, inguinal, and axillary regions. The extensive diagnostic work-up, including advanced imaging, revealed a pattern not commonly associated with diffuse large B-cell lymphoma (DLBCL), including hypermetabolic thickening in the posterior nasopharynx, significant hypermetabolism around the pancreas, and suspicious activity in the spleen and lung. Notably, the involvement extended to both parotid glands and a vast array of lymph nodes, marking an atypical presentation that underscores DLBCL's potential for widespread disease. Biopsies confirmed DLBCL with a non-germinal center phenotype, an aggressive variant with implications for treatment and prognosis. Despite a thorough diagnostic process, the patient elected to forgo the recommended DA-R-EPOCH chemotherapy, highlighting significant ethical and autonomy considerations within the realm of oncological care. This case contributes to the medical literature by illustrating the diagnostic challenges and treatment decision complexities in cases of DLBCL with unusual disease distribution and patient care preferences.

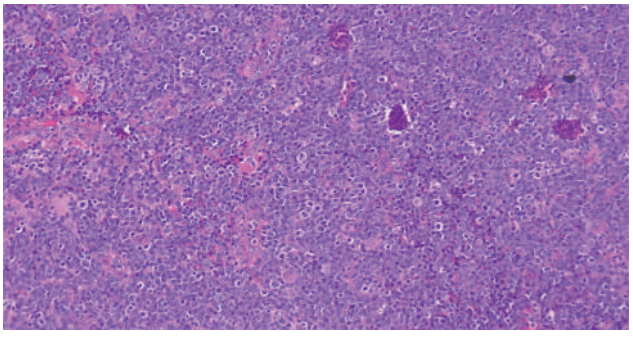

Image 1. Microscopic image of a biopsy taken from the posterior nasopharynx.

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PP 24

From Diagnosis to Recovery: Addressing Rare Malaria with Travel History Using Standard and Apheresis Therapies

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This case report details the diagnosis, treatment, and management of a rare case of severe malaria in a 57-year-old male with a significant travel history, having returned from Sudan where he worked as a textile master for three years. Despite initial improvement after standard malaria treatment 1.5 years prior in Sudan, the patient presented with high fever, chills, shivering, weakness, and loss of appetite in October 2023. Laboratory findings indicated an infection, and an abdominal ultrasound revealed hepatic steatosis and splenomegaly. A peripheral smear confirmed the presence of Plasmodium vivax. Given the severity of the patient's condition, characterized by hypotension and the risk of complications due to his background of diabetes, hypertension, and cardiovascular disease, he was treated with a combination of standard antimalarial therapy (artemether, lumefantrine, and primaquine) and erythrocyte exchange apheresis. This multidisciplinary approach led to significant improvement in his health. This case underscores the importance of considering travel history in the differential diagnosis and highlights the efficacy of combining erythrocyte exchange apheresis with standard antimalarial therapy in managing severe cases of malaria, which is particularly rare in non-endemic regions.

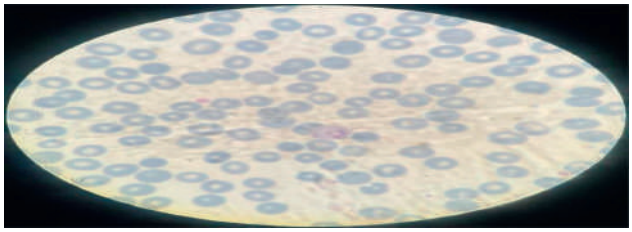

Image 1. Microscopic image of Plasmodium.

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PP 25

Efficacy Assessment of Cytomegalovirus-Specific Immunoglobulins for the Management of CMV Reactivation in High-Risk Hematopoietic Stem Cell Transplant Recipients

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Background: Cytomegalovirus (CMV) infection remains a prevalent and an important challenge encountered post haematopoietic stem cell transplantation (HSCT). If left unaddressed, CMV infection can escalate to CMV disease with adverse outcomes. Additionally, CMV infection alone can indirectly contribute to reduced overall survival (OS) and increased non-relapse mortality (NRM). Prevention serves as the cornerstone for managing CMV infection, while early pre-emptive strategies are employed to mitigate the risk of end-organ disease. Risk factors for CMV infection or disease include CMV seropositive recipients, mismatched and unrelated transplants, the use of T cell depletion agents, steroid therapy, graft-versus-host disease (GvHD), administration of CMV-positive blood products in seronegative recipients, among the other factors. Valganciclovir or ganciclovir remain the mainstream of CMV management in HSCT; however, due to adverse effects such as leukopenia and nephrotoxicity, some patients may exhibit intolerance to these medications or necessitate early discontinuation. Recent survey from the European Society for Blood and Marrow Transplantation (EBMT) highlight the inclusion of CMV immunoglobulin (CMVIG) as a therapeutic option for prophylaxis or pre-emptive interventions. **Objectives:** To assess the efficacy of CMVIG in managing early CMV reactivation among high-risk HSCT recipients. **Methods:** Between December 2022 and February 2024, 13 high-risk patients' post-prophylaxis with early detection of CMV reactivation were treated with CMVIG. All patients were managed with CMVIG as monotherapy. Clinical parameters such as viral load (IU/ml), medication side effects, and patient tolerance were systemically evaluated. **Results:** All patients experiencing CMV reactivation exhibited at least one-risk factor predisposing them to CMV reactivation, including D+/R+ serostatus, exposure to anti-thymocyte globulin (ATG), or received a matched unrelated donor (MUD) or haploidentical donor. All the patients were receiving Valacyclovir 500 mg b.i.d. for prophylaxis. The median age at transplantation was 53.8 years (range: 24-69). The median viremia level detected during treatment was 3175 IU/ml (n=6). A favourable response defined as achieving undetectable CMV viral load was achieved in all patients. None of the patients

required additional antiviral therapy following early detection of CMV viral load. The median duration to achieve viral response was 20 days. CMVIG was well tolerated among all patients, with no reported adverse reactions recorded. **Conclusion:** This single-center analysis demonstrates the clinical efficacy of CMVIG in the pre-emptive management of CMV reactivation, achieving complete remission in all patients without necessitating additional antiviral therapy. Given the inherent neutropenic status of such patients, the use of CMVIG represents a critical strategy to mitigate additional sources of myelotoxicity. Accordingly, CMVIG should be regarded as a valuable therapeutic tool for achieving early control of viral load and preventing further escalation of viremia and CMV-associated disease.

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