acute lymphoblastic leukemia (ALL), but is associated with older age, low white blood cell count, and high risk of relapse. In our study, it was aimed to review our patients with ALL in terms of possible iAMP21 at the time of diagnosis and to evaluate the clinical features. **Methodology:** The results of the patients who were diagnosed with B-cell ALL between 2012 and 2019 and whose treatment was completed, and whose signal increase in the RUNX1 region in the t(12;21) FISH analysis were detected, were reviewed together with the medical genetics section in terms of possible i amp. Those with 5 or more signal increases on a single gene in RUNX1 were considered as i amp. **Results:** In the t(12;21) FISH analysis, signal increases were observed in the RUNX 1 region in 15 (8.3%) of 180 B-cell ALL patients included in the study. Although these signal increases varied between 3-4 in 14 patients, 4-7 signal increases were detected in only 1 patient and were considered as iamp. The patient with iamp was a 6-year-old patient with a white blood cell count of 7600/mm3 at presentation and followed in the intermediate risk group. . Bone marrow relapse developed in 2 years. **Conclusion:** The presence of iAMP21 is associated with a delay in treatment response and increased recurrence in the late period. Patients should be carefully evaluated for iAMP21.

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MYELODYSPLASTIC SYNDROMES

OP 27

DIAGNOSTIC APPLICATION AND CLINICAL SIGNIFICANCE OF FCM WELLS SCORING SYSTEM IN MYELODYSPLASTIC SYNDROMES

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Objective: Myelodysplastic syndromes (MDS) are group of clonal diseases of the hematopoietic system characterized by ineffective hematopoiesis, dysmyelopoiesis, a high frequency karyotype abnormalities and the risk of transformation into acute leukemias. Cytopenic and dysplastic changes are not pathognomonic for MDS, and there are many diseases that can imitate MDS. According to various sources, clonal karyotypic abnormalities are present only in 20-60% of MDS. The diagnosis of MDS is not difficult if blasts or sideroblasts are present in the bone marrow, or there are chromosomal aberrations as evidence of clonal hematopoiesis. The diagnostic problem arises in cases of MDS without sideroblasts, with normal karyotype and/or bone marrow hypoplasia. Since 2012, the ELNet Working Group has proposed and subsequently supplemented guidelines for Flow Cytometry as a complementary diagnostic tool. The aim of the study was to compare the results of the FCM Wells score MDS with the results of the İPSS-R score MDS **Methodology:** The study included 30 patients initially diagnosed with MDS . The classification was carried out according to the WHO Classification of MDS 2016: MDS SLD-6 (20%), MDS-MLD-5 (16.7%), MDS RS-MLD-2 (6.7%), MDS-EB1-9 (30%), MDS EB2-8(27%). According to the IPPS-R, patients were scored based on blasts, cytogenetic examination, hemoglobin/platelet/absolute neutrophil count and scored as very-low, low, intermediate, high, very-high. **Results:** Using the Wells evaluation criteria, which takes into account cytometric analysis of the cells of the main myelopoiesis lines, changes were found in the compartment of granulocytes in 93%, monocytes in 40% and erythrocytes in 73% of cases. High scores on the Wells scale (> 4) were obtained in 89% of (8/9) MDS-EB1, 100%(8/8) MDS-EB2, 80% (4/5) MDS MLD patients, 17% (1/6) MDS −SLD, 50%(1/2) MDS RS-MLD. According to IPPS-R, MDS patients received a score <1.5 very low risk group include 50%(3/6) MDS −SLD, 20%(1/5) MDS-MLD, score > 1.5-3 - Low risk group include MDS −SLD 50%(3/ 6), MDS-MLD-80% (4/5), MDS RS-MLD 50% (1/2), MDS-EB1-78%(7/ 9), score > 3- 4.5-intermediate risk qroup got MDS-EB1 22%(2/ 9), MDS EB2-25% (2/8), MDS RS-MLD- 50%(1/2), Score > 4.5 respectively high risk group got patients MDS −SLD- 17%(1/6), MDS EB2-50%(4/8), Score > 6 very high risk group got MDS EB2- 25%(2/8). The Pearson's correlation coefficient (PCC) showed high correlation between İPSS-R and FCM Wells score was 0.83, p<0.002. **Conclusion:** In our study, the FCM score had a positive correlation with the IPSS-R prediction. Expanded analysis of the main compartments of the bone marrow (early precursors of myelopoiesis, the population of granulocytes and monocytes, erythrocytes) using the Wells scale as an additional tool improves the diagnosis and distinguish low-grade MDS from non-clonal cytopenias.

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HEMOGLOBINOPATHIES (SICKLE CELL DISEASE, THALASSEMIA ETC. . .)

OP 28

THE FREQUENCY OF HLA-A, B AND DRB1 ALLELES IN PATIENTS WITH BETA THALASSEMIA

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Objective: HLA class I and II alleles are shown to be associated with certain diseases. A restricted numbers of alleles were found to be related to alloimmunisation in thalassemia population. The role of human leucocyte antigens in thalassemia is trend topic. In this study, the aim was to evaluate the differences in HLA frequencies of beta thalassemia patients comparing with healthy controls. **Methodology:** The data were collected of 100 patients who were diagnosed with beta thalassemia and 100 healthy controls were included in the study. The low resolution HLA-A, -B, -DRB1, tissue group data were performed Istanbul University, Faculty of Medicine, Medical Biology Department HLA typing laboratory. All data were

analyzed retrospectively and their HLA allele frequencies were analyzed by SPSS (v22) program. **Results:** We found an increased frequency of HLA-B*14 (8% versus 2%) and HLA-B*52 (17% versus 2%) compared to the control group (p=0.05, OR=4.26; p<0.01, OR=10.03). On the other hand, HLA-B*13 frequency was decreased in thalassemia patients (5% versus 13%, p=0.04, OR=0.35). Other HLA-A, -B and -DRB1 allele frequency was similar with healthy controls. **Conclusion:** Our results showed that HLA-B*14 and -B*52 allele were associated with beta thalassemia in Turkish population. Several studies found that HLA-DRB1*15 and DRB1*11 were associated with alloimmunisation in thalassemia. Other some studies showed DRB1*07 and chronic infection relation in patients with thalassemia. We found HLA-B certain alleles difference in thalassemia patients which may yield a challenge in finding the matched donor in our population.

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OP 29

AVASCULAR NECROSIS OF HIP JOINT IN ADOLESCENT AND YOUNG ADULT SICKLE CELL PATIENTS WITH CLINICAL AND RADIOLOGICAL ASPECTS

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Objective: Sickle cell anemia is inherited as autosomal fashion and seen mostly as a result of consanguineous marriages in endemic regions. In the clinical perspective the concept of anemia is dominated by symptoms and complications other than anemia. Here, hip joint avascular necrosis, which is one of the most important chronic complications seen in sickle cell patients in terms of morbidity, will be discussed with radiological and demographic clinical associations. **Case report:** Forty-three sickle cell anemia patients were included in our study, including the young adult age group of 12 years and after, which is the age of onset of adolescence. In this patient group, different degrees of avascular necrosis of the femoral head were detected in 22 patients, and they were classified by different grading methods and compared with the main demographic data. **Methodology:** 22 patients had either unilateral or bilateral avascular necrosis and 21 of 43 patients did not have avascular necrosis. While 17 patients had avascular necrosis on the left, 15 patients had avascular necrosis on the right. Avascular Necrosis of the bilateral hip joint was detected in 10 patients. In the evaluation performed in the patient group, bone infarction in the femur was evaluated in the presence or absence of avascular necrosis and bone infarction was found. The number of bone infarcts accompanying patients with avascular necrosis was 18. Approximately 90 percent of them were receiving hydroxyurea treatment and they were not under chronic transfusion therapy. **Results:** The incidence of bone infarction was significantly higher in patients with positive HIP AVN (p <0.001; p <0.05). It was found that patients with positive bone infarction had lower MCV values (p = 0.036, p <0.05). No statistically significant difference was found between the hip avn (+) patient group and the hip avn (-) patient group in terms of mean age, Hb mean, bk mean, plt mean, Hb S mean, Hb F mean and blood transfusion. The same values ((mean age, presence of bone infarction, hydria doses (1,2 and 3 separately for users), hb mean, bk mean, plt mean, mcv mean, hbs mean, hbf mean and blood draw)) R Ficat and Arlet stages (stage 0,1,2,3,4), R Steinberg stages (stage 0, 1A, 1B, 1C, 2A, 2B, 2C, 3A, 3B, 3C), R Mitchell stages (A, B, C , D, C + D) and L Ficat and Arlet stages (stage 0,1,2,3,4), L Steinberg stages (stage 0, 1A, 1B, 1C, 2A, 2B, 2C, 3A, 3B, 3C), L Mitchell stages (A, B, C, D, C + D). **Conclusion:** During the evaluation, attention should be paid to the points that may be avascular necrosis especially in patients presenting with hip pain, it is also very important not to ignore necroses in surrounding bone tissues even if detect avascular necrosis at the femoral head or not present. In our study, we found that there was a statistically positive relationship between the presence of infarction in the surrounding bone tissues and AVN. Infarcts in the surrounding bone tissues can be both stimulating for AVN at the time of examination and also for future AVN.

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TRANSFUSION MEDICINE / APHERESIS / CELL PROCESSING

OP 30

EVALUATION OF THE RELATIONSHIP OF ABO BLOOD GROUPS WITH MIS-C

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Objective: In the second half of April 2020, a new syndrome associated with SARS-CoV-2 infection,"multisystem inflammatory syndrome in children" (MIS-C), was defined by the World Health Organization.However, the risk factors that predispose some children to develop this inflammatory response are poorly understood .Determining the clinical risk factors of MIS-C is important in preventing undesirable complications such as death in children. **Methodology:** In this study, we aimed to investigate the effect of ABO blood groups, hematological parameters (white blood cell, absolute neutrophil, absolute lymphocyte, platelet count, prothrombin time, activated partial thromboplastin time), cardiac parameters (troponin, brain natriuretic factor, electrocardiography) of patients diagnosed with MIS-C in Ankara City Hospital during the pandemic shortening fraction, ejection fraction), infectious parameters (c-reactive protein, interleukin-6, sedimentation) were analyzed retrospectively. **Results:** Of our 89 cases, 49 (55.1%) were group A, 3 (3.4%) were group AB (3.4%), and 11 (12.4%) were group B. 60 of our patients presented with cardiac involvement, 14 with acute abdomen, 1 with seizure, and 1 with acute kidney injury. In clinically severe cases, MPV