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

was higher and platelet count was lower. O blood group were diagnosed with MISC at a later age. Patients with A blood group have a statistically significantly less serious course compared to other blood groups. **Conclusion:** In our study, we found that individuals with A blood group had MISC more frequently than other blood groups, and MISC was less severe in these patients compared to other blood groups.

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OP 31

EVALUATION OF APPROPRIATE USE OF PEDIATRIC FRESH FROZEN PLASMA IN A TERTIARY CARE HOSPITAL

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Objective: Fresh frozen plasma (FFP) is the primary source of coagulation factors. Indications of FFP use are very limited such as disseminated intravascular coagulation, massive bleeding, thrombotic thrombocytopenic purpura, biopsy for chronic liver disease, and reversing warfarin anticoagulation with severe bleeding. In clinical practice, FFPs are reported to be used inappropriately either in respect of the particular indication or excessive in adult studies. Therefore, we aimed in this study to evaluate indications of pediatric FFP usage in our tertiary care hospital **Methodology:** Patients aged 0-18 years, who were hospitalized in Ankara City Hospital Children's Hospital between September and December 2020, were analyzed retrospectively. Demographic information, diagnosis, FFP transfusion indication, pre-transfusion coagulation results, surgical procedure and bleeding status, and the amount of FFP administered were recorded. Statistical analysis was done with SPSS 18.0 program. **Results:** 1110 units of FFP were transfused to 324 patients (57% males) in 987 transfusion episodes. The mean age of the patients was 5.4±5.7 years68% of the transfusion episodes had a pre-transfusion coagulation testing. 249 (25%) of the transfusion episodes were given before or after minor or major surgery, and 226 (23%) were for plasmapheresis. The most FFP usage was in pediatric and cardiovascular surgery intensive care and hematology/oncology clinics. 69% of the FFP transfusions were appropriate. **Conclusion:** Misuse of FFP exposes patients to unpredictable adverse effects such as allergic reactions, infectious complications, hemolysis, fluid overload, and transfusion-induced acute lung injury (TRALI). In this study, the use of FFP in children was evaluated for the first time in our country, and it was found that the 31% of the FFP transfusions was inappropriate. Regular audit and education programs for the efficient use of FFP by hospital transfusion committees can improve transfusion practices.

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STEM CELL TRANSPLANTATION

OP 32

COMPARABLE OUTCOMES OF ALLOGENEIC PERIPHERAL BLOOD VERSUS BONE MARROW HEMATOPOIETIC STEM CELL TRANSPLANTATION IN CHILDREN

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Objective: Hematopoietic stem cell transplantation (HSCT) is used in many malignant and non-malignant diseases in pediatric patients. Peripheral blood (PB), bone marrow (BM) or cord blood can be used as a graft source. In this study, it was aimed to compare the transplantation results of patients who used bone marrow as a graft source and those who used peripheral blood in pediatric patients who underwent allogeneic HSCT. **Methodology:** We retrospectively analyzed the transplant results of 349 pediatric patients who received a transplant between April 2010 and August 2021 considering their stem cell source as a comparative variable. Engraftment days, development of acute graft versus host disease (aGVHD) or chronic graft versus host disease (cGVHD), development of relapse and overall survival of patients were evaluated. The source of stem cells was BM in 240 and PB in 109 patients. **Results:** The mean age of patients was 96.8±60 and 94.5±63 months in BM and PB group, respectively. The mean myeloid and platelet engraftment time was statistically significantly earlier in PB group ($p<0.001$). Acute GVHD was statistically significantly higher in PB group ($p<0.001$). The relapse rate was statistically significantly higher in the PB group (p:0.02). The mean follow-up period was 49.2±41.6 months. The 5-year overall survival rate was 83.4% in the BM group and 68.5% in the PB group (p:0.003). **Conclusion:** In our study, in accordance with the literature, it was observed that myeloid and platelet engraftment was earlier if the source is PB in HSCT in pediatric patients, but acute GVHD was more frequent. In the survival analysis, the 5-year survival of the bone marrow transplant group was found to be higher. Peripheral blood could be an alternative stem cell source in patients but it would be more appropriate to decide the stem cell source according to the primary diagnosis of the patients.

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CONSULTATION HEMATOLOGY

OP 33

A RARE CAUSE OF SIDEROBLASTIC ANEMIA: TRNT1 MUTATION

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Case report: tRNA nucleotidyltransferase 1(TRNT1) gene encodes a polymerase involved in the maturation of cytosolic and