

chemotherapy. A negative, strong and statistically significant correlation was found between the number of CD34 positive stem cells and BMI in multiple myeloma patients ( $\rho$ : -0.705  $p < 0.001$ ). **Conclusion:** Hematopoietic stem cell transplantation used in the treatment of many haematological disorders has become the gold standard treatment. Therefore, the factors affecting the success of transplantation have been the subject of research, and the effects of factors such as BMI, vitamin D, and gender have been investigated. In a cohort of 149 volunteers participating in a weight loss programme, the absolute number of CD34 positive progenitor cells and VEGF receptor-2, CD133 and CD117 positive cell subtypes decreased in relation with increasing BMI and waist circumference. Weight loss caused an increase in CD34 and CD117/CD34 cell counts. In our study, it was shown that high BMI in multiple myeloma patients caused lower CD34 levels in the cell collection process. We believe that it would be useful to perform this analysis with a larger patient population.

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#### Adult Hematology Abstract Categories

##### Transfusion Medicine and Apheresis

PP 25

#### EVALUATION OF IRON ACCUMULATION DURING CHILDHOOD CANCER TREATMENT

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**Objective:** Iron overload is a major concern in pediatric oncology, particularly with frequent blood transfusions. Although serum ferritin levels are commonly used as a marker, cardiac and hepatic T2\* MRI is the gold standard for accurate assessment. This study aimed to evaluate the relationship between serum ferritin levels and T2\* MRI values in pediatric cancer patients, focusing on cases with ferritin levels exceeding 1000 mcg/L. **Methodology:** This prospective study included pediatric patients aged 10-25 diagnosed with malignancies at Adana City Training and Research Hospital from June 2023 to December 2024. Ferritin and C-reactive protein (CRP) levels were measured during non-infectious periods. Elevated ferritin was confirmed if CRP was also raised. Data on transfusions and ferritin levels were collected at 3, 6, and 12 months post-diagnosis. Patients with ferritin levels above 1000 mcg/L underwent cardiac and hepatic T2\* MRI to assess the need for iron chelation therapy. **Results:** A total of 28 patients (median age: 14 years) were analyzed, with 12 females and 16 males. The median ferritin level at diagnosis was 32.5 mcg/L. Significant associations were found between transfusion frequency and ferritin levels over 1000 mcg/L within 3 months ( $p=0.029$ ) and annually ( $p=0.001$ ). Three patients had ferritin levels above 1000 mcg/L: two with acute lymphoblastic leukemia (ALL) and one with non-Hodgkin lymphoma (NHL). One patient died, another received a bone marrow transplant, and the third had normal cardiac but moderate hepatic iron levels. In one case, ferritin dropped below 1000 mcg/L without

chelation by 12 months. Elevated ferritin in the transplant patient was likely related to the procedure. **Conclusion:** Iron overload is a significant challenge in pediatric cancer, particularly during transplants. Early monitoring and timely chelation can help manage this risk. Future research should focus on optimizing iron management strategies in this vulnerable population.

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#### Adult Hematology Abstract Categories

##### Other Diseases

PP 26

#### IMMUNE THROMBOCYTOPENIA WITH EPSTEIN-BARR VIRUS-ASSOCIATED INFLAMMATORY PSEUDOTUMOR OF THE SPLEEN

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**Objective:** Introduction: Inflammatory pseudotumors (IPTs) are rare and may occur in various anatomic sites. Splenic IPTs are extremely rare, often associated with Epstein–Barr virus (EBV) and have a low-malignant potential with recurrences. The tumor showed a mixed inflammatory infiltrate with spindle cells focally composed of follicular dendritic cell (FDC) proliferations. It can mimic hematopoietic diseases as mostly with solitary mass lesion, but can also be discovered incidentally. **Case Report:** A 64-year-old male patient, admitted to the general surgery department with complaints of hematochezia. He had severe thrombocytopenia ( $2 \times 10^9/L$ ) with mild increased leukocyte count ( $12.270 \times 10^9/L$ ). Endoscopic evaluation of gastrointestinal did not reveal any significant abnormality. Abdominal tomography showed a splenic mass lesion sized of  $40 \times 37$ mm. On MRI the lesion was mildly hypointense on T2-weighted images, not visible on T1-weighted images, and demonstrated progressive peripheral contrast enhancement in dynamic post-contrast series. Bone marrow biopsy showed no hematopoietic disease. A diagnostic splenectomy was decided. Prednisone (1.0 mg/kg/day) was started with a possible diagnosis as immune thrombocytopenia which resulted a significant response and the patients was vaccinated according to the splenectomy vaccination guideline. With a platelet count of  $450 \times 10^9/L$  he underwent splenectomy. Spleen specimen showed a nodular lesion.