of the patients had developed new fractures. **Conclusion:** 1. The 5 mg formulation of zoledronate has been proven to prevent the development of new vertebral fractures or the recurrence of fractures in all myeloma patients, regardless of whether they have a fracture or osteoporosis.2. In addition to its efficacy, this application eliminates the shortcomings associated with the aforementioned treatment regimen. With a single administration at the time of diagnosis, compliance is greatly enhanced.3.From a financial perspective, this has a notable impact on the cost of treatment. In Turkey, the lowest monthly price for a 4 mg dose of zoledronate is 884 TL. If the treatment is administered monthly for 12 months, the total cost is 10,608 TL. The cost of a box of denosumab is 4788 TL, with a total treatment cost of 57,456 TL if applied once a month for 12 months. The cost of a box of zoledronate 5 mg is 898 TL, reflecting the annual application frequency.In accordance with the recommendations set forth by the IMWG guideline, the treatment cost of the zoledronate 5 mg formulation is 11 times less expensive than that of the zoledronate 4 mg formulation and 63 times less expensive than that of denosumab, based on a one-year application period. 4. It is recommended that all myeloma patients, with or without osteolytic bone disease, be evaluated for osteoporosis. There is no clear recommendation in this direction in the guidelines. 5. If we add secondary osteoporosis, glucocorticoid use and previous fracture to the FRAX score, we see that all patients are at very high risk of major osteoporotic fracture and hip fracture. This shows that we need to raise awareness in this area.

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Adult Hematology Abstract Categories

Stem Cell Tranplant
PP 23

PRESENTATION OF 4 CASES OF AUTOLOGOUS HEMATOPOIETIC STEM CELL TRANSPLANTATION AFTER HIGH-DOSE CHEMOTHERAPY WITH REFRACTORY SOLID TUMOR DIAGNOSIS

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Case Report: Hematopoietic stem cell transplantation (HSCT) is a treatment method that can provide cure for most hematological malignant diseases. In addition to hematological malignancy, HCT is also used as a treatment method in benign hematological diseases, solid tumors, and autoimmune diseases. Autologous hematopoietic stem cell transplantation (AHCT) is the most common procedure performed in solid tumors. Transplantation is performed first as high-dose chemotherapy (HDC) and then as OHCT. In our transplant center between 2021 and 2023, were evaluated data of high-dose chemotherapy (HDC) and OHCT. Our first case is a 43-year-old female patient who received multiple treatments with the diagnosis of refractory primary peritoneal adenocarcinoma. Our second case is a 22-year-old male neuroblastoma patient who was first diagnosed with a retroperitoneal mass. Our third case is a 27-year-old male patient diagnosed with refractory Ewing Sarcoma. Our fourth patient is a 29-year-old male, who was diagnosed with refractory testicular cancer and to whom we performed a transplant.

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PP 24

DOES BMI/BSA AFFECT STEM CELL MOBILISATION?: SINGLE CENTRE EXPERIENCE

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Objective: Haematopoietic stem cell transplantation is accepted as an important treatment strategy in the treatment of many haematological diseases including acute leukaemia, lymphoma, multiple myeloma as well as sickle cell anaemia and beta thalassaemia major. BMI is an important factor affecting the donor's response to mobilisation and thus haematopoietic progenitor cell yield. This effect is thought to be due to the relatively high dose of filgrastim administered to donors with higher BMI or to the presence of unknown intrinsic factors affecting mobilisation related to the amount of adipose tissue in each donor. In studies examining the relationship between obesity and CD34, negative effects of BMI on the number of progenitor cells have been shown. **Methodology:** A total of 41 patients, including 32 patients and 9 healthy donors, who underwent stem cell mobilisation for bone marrow transplantation in the therapeutic apheresis unit of Konya City Hospital between 10/2023 and 8/2024 were included in our study. The effects of disease diagnosis, age, number and content of chemotherapy, radiotherapy history, body surface area (BSA), body mass index (BMI), chronic habits such as smoking and alcohol, comorbidity and vitamin D level on stem cell mobilisation were investigated. **Results:** In our study, data of 9 healthy donors, 21 multiple myeloma and 11 lymphoma patients were analysed. Median age was 61 (18-72) years, 46.3% (19) were female and 53.7% (22) were male. There was a history of radiotherapy in 9.8% of the patients. While 46.3% of the patients were mobilised with cyclophosphamide+filgrastim, 41.5% with filgrastim, 4.9% with other chemotherapeutic agents+ filgrastim, 4.9% with filgrastim +plerixafor, 2.4% of the patients had stem cell collection by harvest procedure. On day 1 of stem cell mobilisation, there was no difference between those who collected sufficient CD34 positive stem cells and those who failed in terms of gender, height, weight, BMI, BSA, chronic habits, presence of comorbidities, vitamin D level and number of chemotherapy received. There was no statistically significant correlation between the total amount of CD34 positive stem cells and gender, height, weight, BMI, BSA, chronic habits, presence of comorbidities, vitamin D level and number of received

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 VIRÜS-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 spindled 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. $x10^9$/L) with mild increased leukocyte count (12.270×10^9/L). Endoskopic evaluation of gastrointestinal did not reveal any significant abnormality. Abdominal tomography showed a splenic mass lesion sized of 40×37mm. 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. $x10^9$/L he underwent splenectomy. Spleen specimen showed a nodular lesion.