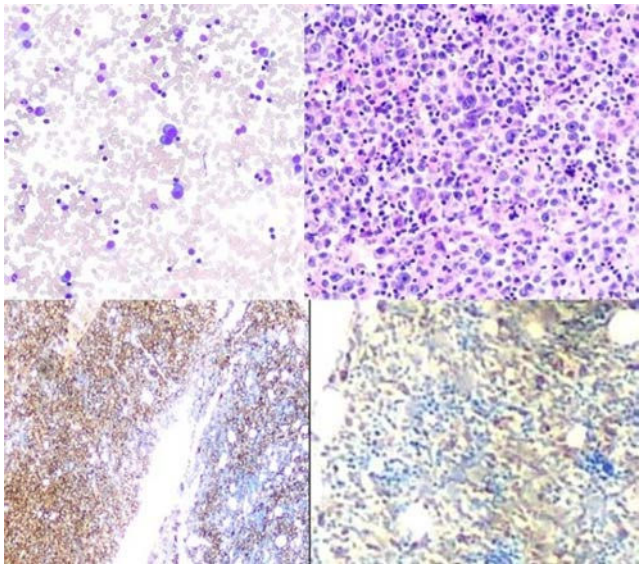
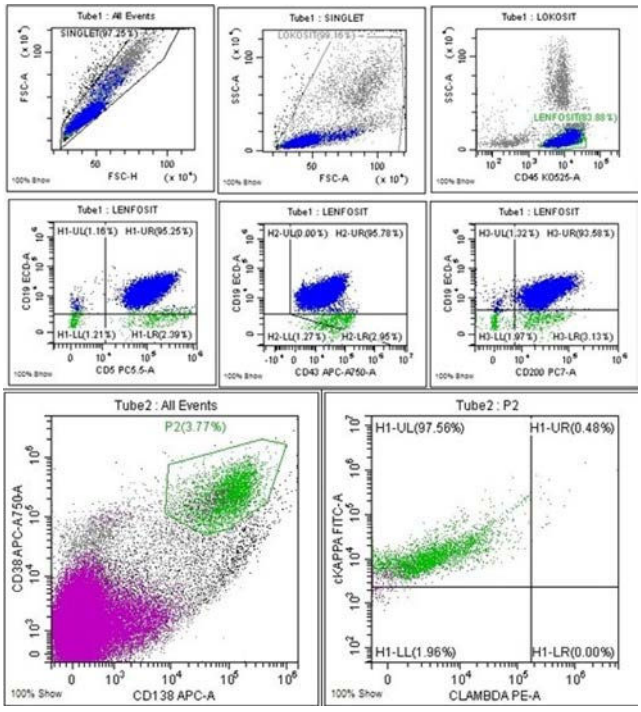
cell lymphocytes. Although it is extremely rare for both conditions to occur simultaneously, it is important for clinicians to carefully evaluate patients, as both cell types originate from the same multipotent stem cells. Multiparametric flow cytometry of bone marrow samples can aid in the accurate and timely diagnosis of such cases. Key questions have arisen regarding whether B-cell CLL and multiple myeloma originate from a single clone or from two distinct clones appearing simultaneously. Previous studies have utilized various techniques, such as FISH or immunoglobulin gene rearrangement analysis, to explore this issue.



a-b Bone marrw aspirate and biopsy showing two morphologically distict populatıons od lymphocytes & plasma cells, many immature. c Immunohistochemical stain on bne biopsy showing plasma cell positive for CD130. D Plasma cells positive for kappa light chains



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PP 22

LONG-ACTING ZOLEDRONIC ACID: ONCE-YEARLY ADMINISTRATION AND EFFICACY EVALUATION IN MYELOMA BONE DISEASE

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Objective: The objective of this study was to investigate the preventive effect of long-acting zoledronic acid on the development of new vertebral fractures in multiple myeloma patients with osteoporosis and/or vertebral fractures. **Case Report:** It is observed that osteolytic lesions in multiple myeloma patients lead to skeletal-related events (SRE), which result in a deterioration in quality of life and a shortened life span. It is estimated that up to 80% of all myeloma patients will experience a skeletal-related event.Although surgical and radiotherapy treatments may be required in specific cases, the most effective approach to avoid recurrence of SREs is to implement preventative measures. The current guidelines for the treatment of myeloma recommend the initiation of bisphosphonate therapy for all patients who meet one of the following criteria: 1. those with osteolytic bone disease, 2. those without bone disease but with symptoms, 3. those with osteoporosis. It is recommended that zoledronate be administered on a monthly basis for a minimum of 12 months. In terms of the length of treatment, it is indicated that the treatment interval can be extended to once every three months or discontinued in patients who have achieved a VGPR or above in response to myeloma treatment.Zoledronate is available in two different forms as 4 mg and 5 mg. Once-yearly administration of the 5 mg form is indicated for patients with osteoporosis and long-term steroid use. However, there is currently no data supporting the use of the 5 mg form in patients with myeloma. **Methodology:** The Zoledronate 5 mg formulation was administered parenterally, in a 250 cc isotonic solution for a period of 30 minutes, in patients who fulfilled the requisite study criteria. Patients were monitored for any fracture symptoms and side effects related to the administration of zoledronate at each visit to our clinic for myeloma treatment. In cases where a suspected fracture was identified, an MRI assessment was scheduled to be conducted on the relevant area. MRI scan of the spine and pelvis was conducted to assess the effectiveness of the zoledronate treatment at the six-month mark. **Results:** The results of the evaluation at six months were available for 16 of the 18 patients. Two patient was excluded from the study due to non-attendance at scheduled control visits and a decision to cease myeloma treatment. All 16 patients underwent a vertebral and pelvic MRI evaluation at the six-month mark. Bone fracture symptoms and biochemical values were assessed at each treatment visit. During the follow-up period, none of the patients reported any symptoms suggestive of new bone fractures. There were no instances of hypocalcaemia, renal dysfunction or albuminuria due to zoledronic acid administration. However, one patient did develop jaw osteonecrosis as a result of dental intervention in the fourth month of zoledronic acid administration.At the six-month MRI examination, none

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