

Objective: Anemia commonly accompanies chronic kidney disease (CKD). Erythropoiesis-stimulating agents (ESAs), such as darbepoetin, are initiated for anemia in CKD. Additionally, hypoxia-inducible factor (HIF) prolyl hydroxylase inhibitors have demonstrated efficacy in treating CKD-associated anemia. This meta-analysis aims to compare the efficacy, safety, and tolerability of enarodustat in anemic CKD patients. **Case report Methodology:** A systematic search of Cochrane CENTRAL, Ovid Medline R, PubMed, and Web of Science databases up to March 1, 2024, was conducted. Randomized controlled trials (RCTs) directly comparing enarodustat with darbepoetin were included. Data from four unique RCTs comprising an inverse variance-weighted random-effects model were utilized for the main analysis. Primary efficacy outcome measures included hemoglobin (Hb) change at weeks 4-6 and during follow-up, while primary safety outcomes focused on serious adverse events (SAEs). Subgroup analyses were performed based on dialysis status and prior use of ESA for the primary outcome. **Results:** Four RCTs with 7 reports involving 586 patients were included in the main analysis. Enarodustat demonstrated superiority to control in terms of change in Hb levels at week 4-6 (RR 0.76, 95% CI 0.02 to 1.50, I²=96%, p=0.04) but non-inferiority during follow-up (MD 0.66, 95% CI -0.22 to 1.53, I²=91%, p=0.14). Enarodustat exhibited comparable effects for safety and tolerability parameters such as SAEs (RR 1.17, 95% CI 0.72 to 1.91, I²=0%, p=0.52), any adverse events (RR 0.95, 95% CI 0.82 to 1.08), any adverse events leading to discontinuation (RR 0.90, 95% CI 0.37 to 2.20), diarrhea (RR 1.50, 95% CI 0.05 to 43.15), hypertension (RR 0.89, 95% CI 0.43 to 1.84), and all-cause mortality (RR 0.63, 95% CI 0.08 to 5.08). Subgroup analysis by dialysis status revealed nonsignificant differences for change in Hb levels at week 4-6 and during follow-up, but comparator-based subgroup analysis demonstrated a significant difference only when comparing to placebo at week 4-6. **Conclusion:** Enarodustat exhibits promise as a treatment option for anemia associated with CKD, demonstrating superiority to control in terms of Hb change at week 4-6 and non-inferiority during follow-up. Moreover, it demonstrates comparable safety and tolerability profiles to darbepoetin, making it a potential alternative in the management of CKD-related anemia.

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OP11

A VERY RARE RELAPS TYPE IN MULTIPLE MYELOMA: LEPTOMENGEAL AND CRANIAL INVOLVEMENT

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Case report: Multiple myeloma is a hematological malignancy that develops as a result of clonal proliferation of plasma cells and progresses with remissions and relapses. It is clinically characterized by many symptoms and signs such as

osteolytic bone lesions, hypercalcemia, renal dysfunction, hypergammaglobulinemia and anemia. However, involvement of the central nervous system, especially the leptomeningeal/cranial region, is a rare and prognostically important form of relapse of the disease. Nervous system

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Adult Hematology Abstract Categories, Stem Cell Transplant

OP 12

Can autologous stem cell transplantation be a treatment option in a patient diagnosed with secondary progressive multiple sclerosis?:Case report

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Case report: Introduction: Multiple sclerosis (MS) manifests itself with plaque formation as a result of defensive T and B cells in the immune system perceiving the myelin sheath around nerve cells as a foreign substance to the body and trying to destroy it, for an unknown reason. In short, it is an autoimmune inflammatory demyelinating disease of the central nervous system. In multiple sclerosis, various interventions such as medication, physical therapy, and stem cell therapy are used to improve patients' quality of life. The goal of autologous hematopoietic stem cell transplantation (AHSCT) is to eliminate and replace the patient's pathogenic immune system to achieve long-term remission of MS. Here, we will present our experience with autologous stem cell transplantation performed in our center for an MS case that had previously received both medical and physical therapy and failed to respond.

Key words: multiple sclerosis, autologous stem cell transplantation

Case report: The 41-year-old male patient was diagnosed with MS in 2012 and has been wheelchair-bound for about 3 years. Glatiramer acetate was started at the time of diagnosis. As the patient's complaints increased, fampridine and ocrelizumab treatments were given, respectively. The patient, who did not respond to treatment, was evaluated as having secondary progressive MS and an autologous stem cell transplant was planned. Mobilization was performed with cyclophosphamide + G-CSF in July 2023. In September 2023, AHSCT was performed with cyclophosphamide (40 mg/kg, 2400 mg in total, 5 days), Mesna (40 mg/kg/day, 2400 mg in total, 5 days) and ATG (360 mg in total) protocol. The patient, who had platelet engraftment on day +9 and neutrophil engraftment on day +11 after AHSCT, was discharged with outpatient clinic control. **Discussion and conclusion:** Despite many advances in MS treatment, there is still no definitive treatment answer. Autologous hematopoietic stem cell transplantation may be promising, as observed in several studies. The aim of AHSCT is to eliminate and replace the patient's pathogenic immune system to ensure long-term remission of

MS (1). In the MIST study; One group of patients with relapse-refractory MS (RRMS) underwent myeloablative AHST with cyclophosphamide (200 mg/kg) and antithymocyte globulin (ATG), and the other group was given disease-modifying therapy. During an average follow-up of 2 years, disease progression was 5% in the AHST group and 62% in the other group. In addition, those who underwent AHST had fewer relapses, and the rate of lesion healing on MRI was observed to be higher in the AHST group (2). In the HALT-MS study, event-free survival and improvement in neurological functions were observed at higher rates in patients who underwent AHST after high-dose immunotherapy (3-4). In a study conducted in Sweden, no recurrence or progression was observed in the first 3 years of treatment after AHST, and it was also stated that no new lesions developed on MRI (5). Although studies show the potential benefits of AHST, more long-term data from randomized controlled trials are needed to evaluate the effectiveness and safety of this intervention in the treatment of RRMS.

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OP 13

Autologous stem cell transplantation experience in an adult recurrent medulloblastoma patient: Case report

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Case report: Introduction: Medulloblastoma is the most common malignant primary embryonal brain tumor in children and occurs in the cerebellum. Approximately 70% of patients are diagnosed before the age of 20. The disease is rare after the 4th decade of life. It originates from the brainstem and metastasizes to other brain tissue, ventricles and medulla spinalis via CSF. Metastasis to bone, bone marrow, lung or lymph nodes outside the CNS is a very rare condition. Surgery, chemotherapy and radiotherapy are used in the treatment of medulloblastoma. In some patients (patients in the high-risk group, relapsed/refractory patients), autologous stem cell transplantation (ASCT) is performed following high-dose chemotherapy to increase survival rates. Here, we will present a case of medulloblastoma in which we performed autologous stem cell transplantation in our center.

Key words: Medulloblastoma, autologous stem cell transplantation

Case report: A 30-year-old male patient applied to the neurology clinic in May 2020 with complaints of headache,

dizziness, nausea, vomiting and fainting. In the brain imaging, a 6 × 4 cm mass lesion was observed in the posterior fossa, located in the ventricle and causing compression symptoms (Cystic Astrocytoma? Medulloblastoma?). The patient underwent ventriculoperitoneal shunt and subtotal mass excision at the neurosurgery clinic. The biopsy pathology result was reported as medulloblastoma (classical type, p53 mutation positive). Chemotherapy was recommended by the oncology clinic, but the patient did not accept the treatment. In August 2020, the patient was given cranial RT and was subsequently followed without medication. In June 2023 due to complaints of pain and weakness in both lower extremities, there was an intradural mass lesion (25 × 19 mm) obliterating the spinal cord at the T11-T12 level and extending to the extraspinal area, and a diffuse mass lesion within the spinal cord at the T10 level with a craniocaudal length of 17 mm. Mass excision as a result of pathology; It was reported as classical medulloblastoma (non-WNT/non-SHH group (grade 4)). After the patient was given 2 courses of mini-ICE chemotherapy, a nearly complete response in the imaging. The patient was mobilized with G-CSF. In our center, the patient was performed autologous stem cell transplantation (6.55 × 10⁶ /kg cells) with temozolamide (2 × 200mg/m² on days -6,-5,-4), etoposide (100 mg/m² on days -7,-6,-5,-4,-3,-2), thiotepa (300 mg/m², on days -4,-3,-2) protocol in November 2023. The patient, who had neutrophil and platelet engraftment on the 10th day after transplantation, was discharged with outpatient clinic control. **Discussion and conclusion:** Although the prognosis has improved in children with medulloblastoma, an estimated 20-30% will relapse following initial treatment (1). Recurrences may be local or widespread (brain and vertebra) (2,3,4). In case of recurrent disease after initial treatment, the likelihood of long-term survival is significantly reduced. Autologous hematopoietic cell transplantation after high-dose chemotherapy has been evaluated in small series and resulted in prolonged disease-free survival in approximately 20-25% of patients (7,8). In the study conducted by Edivian et al., they showed that autologous stem cell transplantation after chemotherapy has a definite, albeit limited, role for selected pediatric brain tumors with poor prognosis and complete/partial remission before transplantation(9).

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OP 14

AUTOLOGOUS STEM CELL TRANSPLANTATION EXPERIENCE IN B-ALL DEVELOPING DURING MAINTENANCE LENALIDOMIDE TREATMENT: CASE REPORT

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