HEMATOLOGY, TRANSFUSION AND CELL THERAPY

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Oral Presentations

Adult Hematology Abstract Categories, Chronic Myeloproliferative Diseases

OP 01

RETROSPECTIVE ANALYSIS OF PRIMARY MYELOFIBROSIS PATIENTS IN AZERBAIJAN

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Objective: Primary myelofibrosis (PMF) is a rare Ph chromosome-negative chronic myeloproliferative neoplasm characterized by the proliferation of atypical clonal megakaryocytes and fibrosis of the bone marrow. The activation of the JAK-STAT pathway plays a central role in the pathogenesis of the disease. The majority of patients with primary myelofibrosis have one of three main genetic mutations, including JAK2 V617F, CALR exon 9, or MPL W515. The clinical features of the disease are highly heterogeneous. Common symptoms and signs include fatigue, constitutional symptoms, itching, abdominal discomfort, bone pain, anemia, leukocytosis, thrombocytopenia, and splenomegaly. A number of clinical studies on the demographic and clinical features of myelofibrosis have been carried out in different countries. Detailed demographic and clinical characteristics of patients with BMF have not been thoroughly studied in Azerbaijan. The aim of our study was to characterize the demographic, clinical, and laboratory parameters of patients with primary myelofibrosis in Azerbaijan. All patients were registered at the Azerbaijan National Center for Hematology and Transfusion. **Methodology:** A retrospective analysis was conducted on the demographic, clinical, and laboratory data of 131 patients diagnosed with PMF between January 1, 2011, and December 1, 2023. The diagnosis of all patients was revised according to the WHO 2016 criteria for PMF. The fibrosis of the bone marrow was assessed histologically according to the Thiele grading system. Ultrasound examination was used to assess splenomegaly, with a craniocaudal size of >14 cm being considered as splenomegaly. All data were collected from clinical records. This was a retrospective, observational, single-center study. **Results:** A total of one hundred thirty-one (131) patients with primary myelofibrosis were analyzed. Of these, 65 (49.6%) were male. The median age of the patients was 57.5 years (range 19-80), with 9 (6.87%) patients being under 40 years of age. The median hemoglobin level was 10.7 g/dl (range 2.1-19.4), median white blood cell count was 12.86 × 10^12/l (range 0.45-121), median platelet count was 322 × 10^12/l (range 24-1940), and median LDH was 530 U/l (range 181-1586). Splenomegaly was detected in 96 patients, with an average spleen size (19.5 cm)reported. Fifty-one patients had Hgb < 10 g/dl. At the time of diagnosis, the pre-fibrotic stage was identified in the bone marrow examination of sixteen patients (17.8%). Splenomegaly was detected in 96 (91.4%) patients. Of the 66 patients who underwent genetic testing, 44 had a positive Jak2V617F mutation, 2 had a positive CALR mutation, and 1 had a positive MPL mutation. **Conclusion:** Thus, this study has investigated the demographic, clinical, and laboratory characteristics of patients with primary myelofibrosis in Azerbaijan.

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OP 02

BIOCHEMICAL PROPERTIES OF RED BLOOD CELLS IN POLYCYTHEMIA VERA

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