Management of PMF-Associated Anemia in Armenia.
Data for the 10-Year Period Between 2010-2020

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Background

Primary myelofibrosis (PMF) is Philadelphia-chromosome-negative myeloproliferative neoplasm (MPN) characterized by bone marrow fibrosis, cytopenias, constitutional symptoms, hepatosplenomegaly, and extramedullary hematopoiesis.

PMF-associated anemia is usually treated with androgens, danazol, erythropoiesis-stimulating agents, immunomodulatory drugs (such as thalidomide, lenalidomide, pomalidomide), corticosteroids, and red blood cell transfusions.

Aims

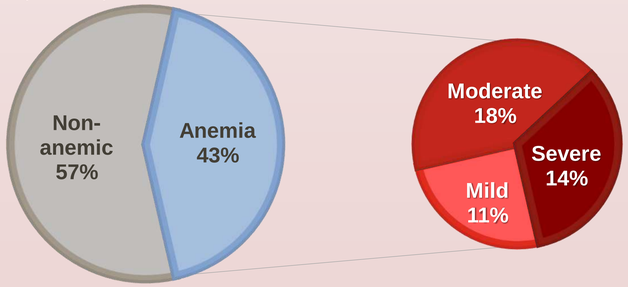
The aim of our retrospective study was to evaluate the management of PMF-associated anemia in Armenia.

Methods

The medical records of all patients diagnosed with PMF in the Hematology Center in Armenia were analyzed retrospectively from 01-Jan-2010 to 31-Dec-2020.

Results

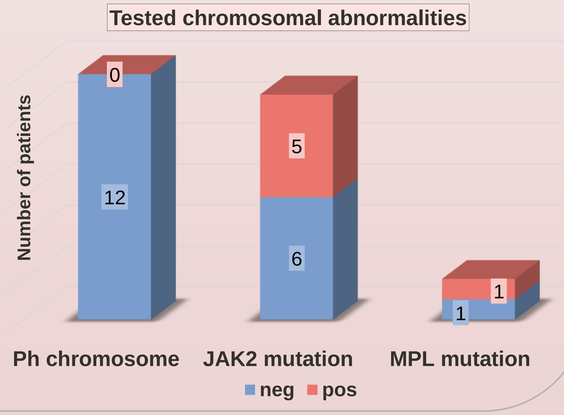
Between 2010-2020 the total number of patients was 238, 112 (47.1%) of which were alive by the time of data collection. *All further data were based on living patients.* The median age was 60 (28-88). Female patients were 102 (42.86%).

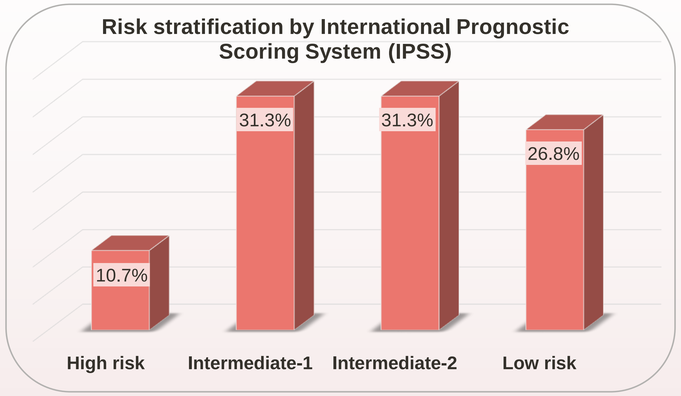


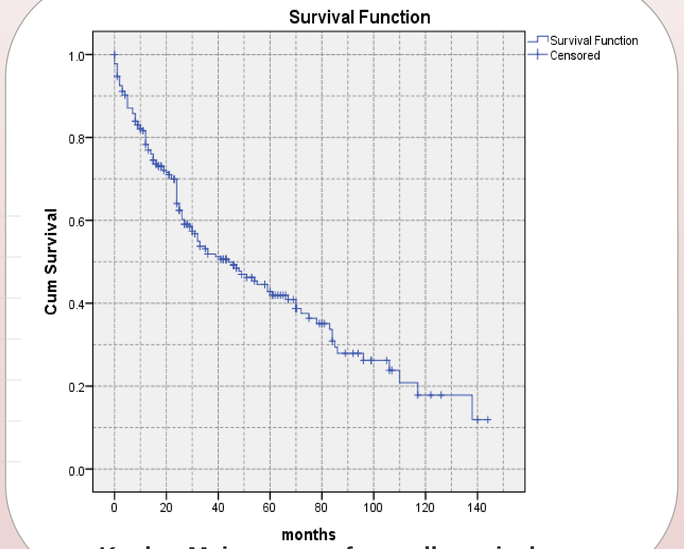
At the time of diagnosis 43% of patients had anemia

At the time of diagnosis, 48 (42.86%) patients had anemia of which 12 (10.71%) had mild anemia (Hb 11-11.9g/dL); 20 (17.86%) – moderate anemia (Hb 8-10.9g/dL); 16 (14.28%) – severe anemia (Hb<8g/dL).

Erythropoietin level was estimated only in one patient.







Kaplan-Meier curve of overall survival

Therapeutic options used for PMF-associated ANEMIA

- In most patients, anemia correlated with chronic transfusions. At different stages of treatment, 23 (20.53%) patients were **transfusion-dependent**
- **Androgens** received 4 (3.57%) patients
- **Prednisone** – 14 (12.5%) patients
- **Lenalidomide** – 1 patient
- Among all transfusion-dependent patients, no one has received **iron chelation therapy**
- None of the patients underwent an **allogeneic hematopoietic stem cell transplantation** because it is not available in the Republic of Armenia.

Treatment restrictions were due to financial reasons.

Conclusion

Our work showed that the significant ***diagnostic and therapeutic limitations*** in our country led to Inferior outcomes.

The method of correlation of anemia in PMF patients is chronic transfusions, which also impair the quality of life of patients.