

Myeloproliferative neoplasm

- Proinflammatory and prothrombotic conditions in JAK2V617F-positive MPN: a case of Lemierre's syndrome in essential thrombocythemia
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Myeloproliferative neoplasm (MPN) is a group of rare blood disorders characterized by the overproduction of blood cells in the bone marrow. The three main types of MPN are polycythemia vera (PV), essential thrombocythemia (ET), and myelofibrosis (MF).

Myeloproliferative neoplasms (MPN) are characterized by uncontrolled expansion of myeloid cells, disease-related mutations in certain driver genes including JAK2, CALR, and MPL, and a substantial risk to progress to secondary acute myeloid leukemia (sAML). Although behaving as stem cell neoplasms, little is known about disease-initiating stem cells in MPN.

Young adults with MPNs have different PROs compared with middle-aged and elderly patients ¹⁾.

Aquagenic and non-aquagenic pruritus

Pruritus, especially AP, which is a major constitutional symptom observed in MPN, should be assessed in all MPN patients due to the higher symptom burden and higher risk of evolution ²⁾.

The data were collected from three groups of Polycythemia Vera (PV) patients (70 people), Essential Thrombocythemia (ET) (50 people), and Primary Myelofibrosis (PMF) (103 people) by sampling for JAK2, CALR, and MPL gene mutation tests and demographic and clinical information have been collected through examination. The data were analyzed by SPSS v. 23 software and descriptive and chi-square statistical tests. The study included 223 myeloproliferative neoplasms (MPN) patients. JAK2 V617F mutation was detected mostly in PV patients and CALR and MPL mutations in ET and PMF patients and this mutation difference was significant in prognosis and disease diagnosis. An association between JAK 2 mutation and splenomegaly was also demonstrated. Considering the lack of a definitive diagnostic method in myeloproliferative disease, the results of this study showed that

molecular studies, including JAK2 V617F, CALR, MPL mutations, and other hematological tests can be useful and effective in the diagnosis of MPN. In addition, it is necessary to pay attention to new diagnostic methods ³⁾.

Philadelphia-negative myeloproliferative neoplasm

[Philadelphia-negative myeloproliferative neoplasm](#)

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Bao M, Zhang M, Shi H, Liu X, Duan M, Zhuang J, Du X, Qin L, Hui W, Liang R, Wang M, Chen Y, Li D, Yang W, Tang G, Zhang W, Kuang X, Su W, Han Y, Chen L, Xu J, Liu Z, Huang J, Zhao C, Tong H, Hu J, Chen C, Chen X, Xiao Z, Jiang Q. Patient-reported Outcomes in Young Adults with Myeloproliferative Neoplasms. *Acta Haematol.* 2023 Feb 22. doi: 10.1159/000529750. Epub ahead of print. PMID: 36812897.

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Basim Najm M, Jalal SD, Getta HA. The Impact of JAK2 V617F, CALR, and MPL Mutations as Molecular Diagnostic Markers of Myeloproliferative Neoplasms in Kurdish Patients. A Single-center Experience. *Cell Mol Biol (Noisy-le-grand)*. 2022 Aug 31;68(8):202-209. doi: 10.14715/cmb/2022.68.8.34. PMID: 36800830.

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