

weight loss of 6-7 kg. Lumbar and whole spinal MRI revealed changes in the intensity of the medullary signal, mild decrease in the height of L2-L3 and T10. EMG revealed polyneuropathy. PET showed a moderate uptake of FDG in the localization of the bone marrow. The spleen was enlarged-size-157 mm. **Methodology:** Laboratory findings: hemogram-WBC- $11.15 \times 103/\mu\text{L}$ , Hgb-15g / dL, HCT-48%, PLT- $604 \times 103/\mu\text{L}$ . Bone marrow biopsy, imprint, aspiration revealed moderately hypercellular bone marrow with increasing in all 3 series, groupings in megakaryocytes, containing limited (3-4%) kappa monoclonal plasma cell population; moderately increasing reticulin fibers (grade 1 according to WHO). Karyotype 46, XY; multiple myeloma FISH panel: translocation 4; 14 and translocation 11; 14 (+). JAK2V617F-50.48% (+). **Results:** The key point in the diagnosis was trilineage hyperplasia of the bone marrow, because the reticulin fibrosis may occurs in 20% of PV cases. Thus, the patient was diagnosed with LPV. Due to the detection of plasma cells in the bone marrow (3-4%), kappa light chains, with the diagnosis of LPV, the diagnosis of MGUS was established. The patient was prescribed ASS 100 mg per os, Hydrea at a dose of 500 mg every other day. For MGUS, the "wait and watch" tactic was chosen. **Conclusion:** In the diagnosis of LPV, along with molecular genetic research, trepanobiopsy of the bone marrow plays a leading role. The possibility of a combination of myeloproliferative and other diseases should not be ruled out.

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#### PP 16

##### THE OUTCOME OF FATHERHOOD IN PATIENTS WITH PHILADELPHIA NEGATIVE MYELOPROLIFERATIVE NEOPLASMS, A SINGLE INSTITUTION EXPERIENCE

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**Objective:** The aim of this retrospective study is to evaluate fertility in the Philadelphia-negative MPN male patients and the effect of treatment received on male fertility and the outcome. **Methodology:** This is a single-center, mixed-design study (retrospective + phone interviews) conducted within the National Center for Cancer Care and Research. **Results:** 120 patients were interviewed, only 19 patients (15.7%) had met the inclusion criteria. The majority of patients had lost follow-up or cannot be contacted, and 29.1% of patients had their families completed by the time of diagnosis. The treatment received includes hydroxyurea, interferon, and ruxolitinib. The mode of delivery was normal vaginal delivery in 68% of the pregnancies. The total number of conceptions was 27; three stillbirths were reported. **Conclusion:** The data showed that most MPN male patients on treatment had their offspring born normally with no delivery complications, no reported congenital anomaly or growth retardation, and no report of MPN-related cancers. Though, further studies with a larger sample size are required

to fully understand the effect of medications on the outcome of fatherhood in Philadelphia negative MPN patients.

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#### PP 17

##### CONCOMITANT JAK2 AND BCR-ABL1 IN PATIENTS WITH CHRONIC MYELOID LEUKEMIA CLINICAL IMPACT AND RESPONSE TO THERAPY: A SYSTEMATIC REVIEW

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**Objective:** The aim of this review is to assess patients with chronic myeloid leukemia with concomitant JAK2 positive for their characteristics - response to treatment **Methodology:** We searched the English literature (Google Scholar, PubMed, and SCOPUS) for studies, reviews, case series, and case reports of patients with chronic myeloid leukemia who had JAK2 mutation. Inclusion criteria: were the presence of JAK2 mutation in CML patients with BCR-ABL1 rearrangement and, secondly, age  $\geq 18$  yrs. The search included all articles published up to 20th April 2021. **Results:** A total of 25 patients met our criteria of the search. Twenty-two patients were diagnosed in the chronic phase, 2 patients in the accelerated phase, and one patient transformed to the blast phase. More females  $n=16$  and 10 males. The mean age at the time of diagnosis was 61.3 years. 9 patients had to be switch to second-line therapy. Age and gender distribution and the presence of splenomegaly or organomegaly are almost the same. Males were slightly more than females. **Conclusion:** It is difficult to conclude that multi-kinase inhibitors are superior to imatinib in treating CML with concomitant JAK2 mutation. But the result of the reported cases showed that multi-kinase inhibitors are more likely to be successful in achieving remission and loss of JAK2 mutation. However, it is difficult to generalize the result without further studies due to the few numbers of patients and the unusual association.

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#### COAGULATION DISEASES

#### PP 18

##### DOUBLE HETEROZYGOTIC FV DEFECT WITH HETEROZYGOTIC FV LEIDEN MUTATION AND FV DEFICIENCY IN THROMBOSIS

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**Objective:** FV Leiden mutation causes activated protein C (APC) resistance and causes an increase in thrombin level.