revealed a preferential loss of terminally mature CD27−CD11b + NK subset in CML mice, suggesting a functional shift from cytotoxic phenotype toward the immature cytokine-producing. In agreement, CML-exposed NK cells show impaired cytotoxicity as measured by target-specific degranulation *ex vivo*. Next, we mapped the transcriptional landscape of CML-exposed NK cells using single-cell RNA-sequencing. We confirmed decreased gene expression of NK maturation and cytotoxicity markers (*Itgam, Cx3cr1, Prf1, Gzma* ) and upregulation of inhibitory molecules (*Tigit, Lag-3, Pdcd1lg1/2*) and proteins involved in the cell cycle and senescence (*Mki67, Ccna, Ccnb* ). Importantly, CML-exposed NK cells had significantly increased mRNA levels of inflammatory cytokines including IL1$\beta$, TNF, GM-CSF; cytokine receptors Il6st, Il-2Ra; and negative regulators of STAT signaling SOCS1/2/3 and CIS. Furthermore, IL-6-STAT3 and IL1$\beta$/TNF-signaling gene signatures were enriched in CML-exposed NK cells – an effect that is likely to be triggered by inflammatory cytokines. Thus, we next found that peripheral blood serum from CML mice dampens healthy NK cell degranulation *ex vivo*, compared to serum from control mice. Further ELISA analysis revealed elevated levels of IL-6, IL-1, TNF, and GM-CSF in CML serum samples. Some of these cytokines might be secreted by functionally skewed NK cells, as suggested by gene expression analysis. **Conclusion:** Altogether, our data suggest that leukemic cytokines contribute to NK cell dysfunction and polarize them toward a pro-inflammatory phenotype, representing optimal targets for NK-boosting CML immunotherapies.

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## THE INFLUENCE OF THE JAK2V617F MUTATION ON CLINICAL, LABORATORIAL, AND MORPHOLOGICAL VARIABLES IN BCR-ABL NEGATIVE MYELOPROLIFERATIVE NEOPLASMS

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**Objective/Aim:** Investigate the correlation between the presence of the *JAK2V617F* mutation and laboratorial, morphological and clinical findings. **Methods:** This is a retrospective, observational, single-center cohort-study involving adults with classic *BCR-ABL* negative MPN and myelofibrosis secondary to them (n = 119), in a Brazilian universitary hospital. It were evaluated hematological parameters and nonspecific inflammatory biomarkers such as LDH, CRP, ESR, and ferritin, in peripheral blood, as well as the occurrence of thrombo-hemorrhagic events or death, by consulting medical records. **Results:** Patients diagnosed with ET (n = 75), and *JAK2V617F* -positive (n = 69; 92,0%) had significantly higher values of marrow cellularity, hemoglobin, hematocrit, neutrophil to lymphocyte ratio (N/L ratio), ferritin, also higher RBC and WBC counts. Besides a higher occurrence of thrombotic and/or hemorrhagic events (p = 0.006). A positive correlation (Spearman) was observed between the *JAK2V617F* mutation and thrombo-hemorrhagic events, bone marrow cellularity, RBC count, hemoglobin concentration, hematocrit, WBC count, N/L ratio, and ferritin dosage. **Discussion:** Patients with ET positive for JAK2V617F mutation showed a “PV-like” profile with higher values of hemoglobin, hematocrit, hematimetry, LDH, and higher medullary cellularity in addition to, lower platelet values and higher incidence of thrombotic events, as suggested by previous studies. After all, JAK2V617F status is incorporated into the International Prognostic Score for Thrombosis in ET (IPSET). Besides demonstrating the clinical, epidemiological, laboratory profile, and mutational status in Brazilian patients in a university hospital, our study points to the need to reinforce the orientation about certain exams. It is essential to evaluate not only the incorporation of ESR in the routine investigation of patients in whom there is suspicion of classic MPN *BCR-ABL* negative, especially PV, but also the inclusion of CRP dosage in the prognostic evaluation of patients with ET and PV. **Conclusion:** There is a correlation between the *JAK2V617F* mutation and higher values of RBC count, WBC count, N/L ratio, and ferritin, in addition to greater cellularity in the bone marrow. A “PV-like” profile was also observed in JAK2-positive TE patients.

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## AVALIAÇÃO DA REATIVAÇÃO DE HEPATITES B E C EM PACIENTES COM LEUCEMIA MIELOIDE CRÔNICA TRATADOS COM INIBIDORES DE TIROSINOQUINASE

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**Introdução:** A reativação de hepatite B e C pode ocorrer durante o tratamento da leucemia mieloide crônica (LMC) com inibidores de tirosinoquinase (ITQ). **Objetivos:** Avaliar a prevalência de hepatite B (HBV) e C (HCV) em pacientes com LMC e a taxa de reativação de hepatite nesta população durante o tratamento com ITQ, tendo em vista o aumento da prevalência de LMC e a ausência de dados brasileiros sobre a reativação. **Materiais e métodos:** Foram incluídos no estudo todos os pacientes portadores de LMC tratados com ITQ em um único centro entre 2000 e 2022. Foram coletados dados prontuários sobre o status sorológico da HBV e HCV ao diagnóstico da LMC e sobre a ocorrência de reativação durante o tratamento. Foram colhidas novas sorologias de hepatite (ELISA) nos pacientes com mais de 5 anos de uso de ITQ. **Resultados:** Entre outubro de 2019 e fevereiro de 2022, foram analisados 249 pacientes (56 óbitos, 5 perdas de seguimento e