informações detalhadas sobre o tamanho, complexidade e a presença de marcadores de membrana celular nas células analisadas. A utilização de painéis e tubos otimizados, contendo marcadores celulares específicos pode aumentar a sensibilidade e especificidade do teste, contribuindo para um diagnostico assertivo a um custo mais acessível. **Objetivos:** Este artigo tem como objetivo a padronização e utilização do tubo CLEARLLAB LS para avaliação primária de sangue periférico e medula óssea. **Materiais e métodos:** O estudo foi realizado em um laboratório de apoio de grande porte localizado em uma unidade de processamento especializada em São Paulo. Foram analisadas cerca de 20 amostras de sangue periférico e medula óssea, coletadas em tubos contendo EDTA, provenientes de pacientes com suspeitas diversas de leucemias agudas. Para todas as amostras foram correlacionados os resultados do hemograma e do painel de anticorpos a ser executado. Cada lote de anticorpo utilizado é validado para garantir que atenda aos critérios de desempenho esperados, com base em parâmetros como o Stain Index, que quantifica a relação sinal-ruído dos dados de fluorescência. O estudo comparou o tubo CLEARLLAB LS, que utiliza dropping de anticorpos líquidos, com os tubos atualmente utilizados e validados no setor. **Resultados, discussão e conclusão:** O CLEARLLAB LS demonstrou ser eficaz tanto na caracterização completa de amostras normais quanto como uma ferramenta para a expansão do painel de doenças oncohematológicas crônicas e a otimização os reagentes. O novo tubo foi implementado em 24 de junho de 2024, e nos gráficos é possível identificar a redução das complementações realizadas pela área, comprovando a maior sensibilidade do tubo.

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PHILADELPHIA ACUTE LYMPHOBLASTIC LEUKEMIA (PH+ ALL) OR BLASTIC CRISIS OF CHRONIC MYELOID LEUKEMIA (CML-BC)?

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Introduction: The presence of BCR::ABL1 gene rearrangements (Philadelphia Chromosome) in acute lymphoblastic leukemia (Ph+ ALL) at diagnosis is critical for prognostic stratification and treatment decisions. Distinguishing between Ph+ ALL and lymphoid blast crisis of chronic myeloid leukemia (CML-BC) is challenging. While most Ph+ ALL cases present with a p190 (e1a2) fusion, a subset displays p210 (e13a2 or e14a2) or p230 fusions. It remains unclear whether these cases are true de novo Ph+ ALL or undiagnosed chronic phase CML progressing to blastic crisis. **Methods:** Retrospective analysis of patients diagnosed with ALL (characterized by > 20% lymphoblasts) referred for hematopoietic cell transplantation (HCT) between 2019 and 2024, who exhibited t(9;22)(q34;q11) or BCR::ABL1 rearrangements identified through cytogenetic analysis or RT-PCR. The relationship between transcript subtypes identified through molecular biology and clinical, morphological, and phenotypic characteristics, and minimal residual disease (MRD) via RQ-PCR (molMRD) and flow cytometry (flowMRD) were analysed in relation to survival outcomes. **Results:** 30 ALL patients assessed between 2016 and 2024 had Ph+ (24% of 125 ALL), 18M/12F, 22 adults median age 36.6 years (range 19-75.6) and 8 children (4.77 y, range 3.8-14). Twenty patients with p190 (e1a2) transcript were classified as Ph+ ALL (17 B-cell Ph+ ALL and 3 early T-cell Ph+ ALL) and 10 patients with p210 transcript were classified as having CML blastic crisis. In the CML group, transcript subtypes included e13a2 (b2a2) in 2 patients, e14a2 (b3a2) in 1, and multiple associated transcripts (b2a2 and/or b3a2 with e1a2) in 7 patients. Of these 10 patients, only 2 had a prior CML history with previous ITK use; 4 presented with extramedullary disease (2 CNS, 1 breast, 1 liver), and 4 had leukocytosis with neutrophilia in the initial CBC, suggesting myeloid involvement. The Ph+ ALL group had a lower median age at diagnosis (23.9 vs. 41.8 years) compared to the CML-BC group, lower median leukocyte (5,565 vs. 57,850/uL) and platelet counts (32,000 vs. 134,000/uL) at diagnosis. There were no differences in precursor left shift or blast predominance between groups. All patients received polychemotherapy including tyrosine kinase inhibitors (TKIs). Early death due to refractory disease occurred in five older adult patients (16.6%). Three children and two AYA patients maintained a complete response to TKI therapy. Twenty patients (7 BC-CML and 12 Ph + ALL) underwent HCT; five of these relapsed, with three undergoing a second HCT and two dying due to relapsed disease. No differences was found in overall survival (63.6% vs. 50.0%, $p = 0.25$), median survival time (14.5 years vs. 2.5 years), or relapse rates between groups. MRD was evaluated using RQ-PCR and MFC at 1-, 2-, and 3 months post-transplantation. MRD analysis showed a strong correlation between MFC and RQ-PCR results ($r = 0.643$, 95% CI 0.50-0.74, $p < 0.001$). Of the 54 samples classified as MRD-negative by RQ-PCR, 53 (98.1%) were also MRD-negative by MFC. Among the 48 samples deemed MRD-positive by PCR, 39 (81.3%) were confirmed positive by MFC. When restricted to samples with > 0.01% MRD by PCR, the proportion of those containing ALL cells according to MFC remained high (28 of 30, 93.3%). **Conclusion:** In conclusion, this retrospective study underscores the complexity in distinguishing Ph+ ALL from CML-BC and highlight the importance of comprehensive molecular and phenotypic analyses in guiding treatment strategies and prognostication. Future research should focus on refining methodologies for MRD assessment of Ph+ ALL patients and exploring their synergistic potential to better distinguish between Ph+ ALL and CML-BC.

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INVESTIGAÇÃO DOS MARCADORES CD200 E CD79B NAS DOENÇAS LINFOPROLIFERATIVAS CRÔNICAS DE CÉLULAS B

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