

tal efeito adverso. Portanto, monitorização hematológica deve ser realizada de rotina em pacientes que estejam em uso de Alectinib.

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CARDIOVASCULAR BIOMARKERS IN SICKLE CELL DISEASE – CLINICAL AND ECHOCARDIOGRAPHIC CORRELATIONS IN A CROSS-SECTIONAL STUDY WITH 126 PATIENTS

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Introduction: Cardiac biomarkers can be useful in understanding the systemic and heart manifestations of sickle cell disease (SCD). Biomarkers reflect various aspects of heart disease (remodeling, injury and myocardial strain), with discriminatory potential for non-cardiac complications. **Patients and methods:** SCD patients (SS/Sβ⁰) in steady state, were studied, correlating clinical manifestations and echo parameters (myocardial work - MW and speckle tracking), pre-MSCD severity score (integrating clinical and echo data), and cardiac biomarkers (high-sensitivity troponins – hs-cTn I and T, NT-pro-BNP, ST2s, and galectin-3 - GAL3). Quantitative characteristics were analyzed by Spearman tests, and qualitative characteristics by Mann-Whitney test. Hemolytic Index (HI) was calculated through Principal Component Analysis. Generalized linear Poisson models were generated for hs-cTn, and γ -distribution models were employed for other markers, with final models selected through the Stepwise Backward method. **Results:** We studied 126 patients (mean age 37.2 ± 11.6 years), 42.1% male, and 80.2% SS. 47% were on hydroxy-urea treatment and 30.2% on a chronic transfusion. NT-pro-BNP was elevated in 44% (> 160 ng/mL in 37%), correlated with female gender ($p < 0.001$), severity score ($p = 0.001$), uric acid ($p = 0.017$), HI ($p < 0.001$), Global Work Index (GWI) ($p = 0.003$), left atrial (LA) stiffness ($p = 0.003$), and ventricular mass (VM) ($p = 0.02$). ST2s were elevated in 11% and correlated with male gender ($p > 0.001$), HI ($p > 0.001$), cardiac index ($p = 0.015$), and LA strain reservoir function ($p = 0.034$). GAL3 was elevated in 42.8%, correlated with E/e' ratio ($p = 0.006$), uric acid ($p = 0.005$), and absence of chronic pain ($p = 0.046$). hs-cTn correlated with age (c-TnI $p = 0.004$; c-TnT $p > 0.001$),

HI ($p > 0.001$), diastolic dysfunction ($p > 0.001$), left VM ($p < 0.001$), increased GWI ($p < 0.001$), and reduced MW efficiency ($p < 0.001$). hs-cTn I also correlated with increased LA reservoir function ($p < 0.001$) with reduced conduit function ($p < 0.001$). hs-cTn T correlated with uric acid ($p = 0.001$), and in univariate analysis was also correlated with severity score. The values of both hs-cTn correlated with increased GWI ($p < 0.001$) and reduced MW efficiency ($p < 0.001$). **Discussion:** The biomarkers demonstrated various clinical and pathophysiological aspects of SCD. NT-pro-BNP is a routine marker with correlations similar to literature, except for higher values in females, also observed in non-SCD population. ST2 and GAL3 had limited correlations with echo findings, likely due to their production in extracardiac tissues affected by inflammation/vaso-occlusion. Both were linked to the HI, and the decrease in GAL3 in chronic pain can be attributed to chronic opioid use causing reduced synthesis of it. The elevation of hs-cTn was expected due to the analytical characteristics of high-sensitivity assays, but low in terms of the extent of heart involvement. hs-cTnT was more associated with general severity, like in the general population, where it is associated with overall mortality, while hs-cTnI is more connected to heart disease. MW in SCD is optimized to the maximum with a very low Global Work Wasted, and hs-cTn elevation is associated with reduced MW efficiency, indicating mecano-energetic uncoupling and subtle systolic dysfunction. **Conclusion:** Our study demonstrates that cardiac biomarkers can be used for clinical and pathophysiological evaluation, with NT-pro-BNP confirming its role in clinical stratification. ST2s and GAL3 may reveal new pathophysiological pathways in hemolysis and the interaction of opioids and chronic pain. Troponins are promising as prospective tool and may unveil ischemic damage resulting from myocardial mecano-energetic dissociation.

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JORNADA DO PACIENTE COM TALASSEMIA BETA NO BRASIL: PERCEPÇÕES DO TRATAMENTO

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Introdução/Objetivos: A talassemia é um tipo de anemia hereditária que faz parte de um grupo de doenças do sangue chamadas hemoglobinopatias. A jornada do paciente envolve diversas etapas e mapear sua experiência é fundamental para encontrar formas de atuar e discutir melhorias no tratamento e garantir que todos os pacientes sejam atendidos, de forma correta, nos centros de tratamento. Este estudo tem como objetivo analisar as perspectivas e mapear os desafios encontrados durante a jornada do paciente com Talassemia. **Materiais e métodos:** Estudo observacional e descritivo baseado na