EVALUATION OF PAROXYSMAL NOCTURNAL HEMOGLOBINURIA CLONE ON APLASTIC ANEMIA DIAGNOSIS

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Aplastic anemia (AA) is a disease characterized by hipocellular bone marrow and perypheric pancitopenia. Paroxysmal nocturnal hemoglobinuria (PNH) is characterized by intravascular hemolysis, venous thrombosis and marrow hypoplasia. The link between PNH and AA has been studied and around 20 to 25% of patients with AA has PNH clone. Thus, was developed at the Hemope, a study aiming the identification of PNH clone in AA. This study had 10 patients with AA. To identify the PNH clone was used peripheral blood (PB) applying monoclonal antibodies CD55 and CD59 on Flow Cytometry (FC). To the detection of intravascular hemolysis, had been collected PB evaluating lactate dehydrogenase (LDH) and indirect bilirubin (IB) in Cobas Myra Plus. In all of the samples, FC detected PNH clone equal or superior to 10% in three patients, which also presented increased LDH, while IB was elevated in only one case. Small clones had been identified in five patients and in these, not had clinical manifestation of PNH, but two cases showed high LDH. Finally, the result of this research consolidated FC in the detection of small PNH clone in AA and demonstrated that LDH is the most indicated biochemical parameter to evaluate intravascular hemolysis in PNH/AA syndrome.

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