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PROGNOSTIC MARKERS IN STROKE IN SICKLE CELL ANEMIA PATIENTS

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Introduction: Sickle cell anemia (SCA) is an autosomal recessive condition that presents with a wide variety of clinical manifestations. Among them, stroke is one of the most debilitating pathologies. **Objectives:** To analyze the potential associations between laboratory markers and the incidence of stroke in patients with sickle cell anemia (SCA) treated at the Hematology and Hemotherapy Foundation of Amazonas (HEMOAM). **Material and methods:** The study employed a cross-sectional observational design, encompassing a cohort of patients of both sexes, with diagnoses substantiated by the HPLC technique. The technique employed for the diagnosis of stroke was transcranial Doppler (TCD). The laboratory data were obtained through access to the patient's medical records. **Results:** A total of 274 patients participated in the study. In patients who developed stroke, there was a significant increase in direct bilirubin (DB) ($p < 0.001$), HDL ($p = 0.03$), iron ($p < 0.001$), ferritin ($p < 0.001$), and HBA1 ($p < 0.001$) when compared to those who did not develop stroke. **Discussion and conclusion:** Studies have shown that about 10% of SS patients have experienced a stroke. Studies show that up to 20% of patients over 19 years old and up to 50% of patients over 45 years old have strokes. The study found higher levels of BD, iron, ferritin, and HBA1 in people with stroke. This is similar to what other studies have found. These studies suggest that higher levels of these substances are linked to severe hemolysis. Hemolysis is when there is too much red blood cell destruction. This can lead to more frequent blood transfusions. But this is the first time that really high HDL levels have been linked to stroke. Studies usually show that SS patients have lower levels of HDL. It is important to know that doctors are using a treatment called hydroxyurea together with red blood cell transfusions at least once a month. This treatment is currently being used in blood centers to help patients keep a hemoglobin concentration of at least 9 g/dl and an HbS fraction of less than 30%. This helps reduce the number of stroke cases in patients. Stroke has been shown to have a devastating impact on patients with atrial fibrillation (AF), often resulting in increased mortality, disability, and loss of neurocognitive function. The implementation of effective screening tests and continuous transfusion therapy has led to the prevention of several clinical complications. The multifaceted nature of stroke risk, encompassing a constellation of risk factors and potential complications, is well-documented. Although stroke is more prevalent among adults, the risk is particularly elevated in children and in individuals who do not undergo comprehensive monitoring. Appropriate management, with an emphasis on early diagnosis and rigorous monitoring, has been demonstrated to significantly improve quality of life and reduce mortality among sickle cell disease patients.

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REAL-WORLD SAFETY PROFILE OF TWICE-DAILY DEFERIPRONE FOR IRON OVERLOAD IN US PATIENTS WITH THALASSEMIA, SICKLE CELL DISEASE OR OTHER ANEMIAS

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Introduction: Iron overload is a significant cause of transfusion-related morbidity and mortality. Deferiprone (DFP) is an oral iron chelator with > 28 years of safety and efficacy data. Initially approved for administration three times a day (TID), a twice-a-day (BID) formulation was developed to improve patient adherence. The United States (US) Food and Drug Administration (FDA) approved DFP BID for transfusional iron overload in patients with thalassemia in 2020, and DFP TID and BID for sickle cell disease (SCD) or other anemias in 2021. **Objectives:** To evaluate the real-world safety profile of DFP, the Ferriprox® Total Care Registry was established in the US. Here, we assess the safety of DFP BID in patients with thalassemia, SCD, or other anemias in real-world clinical practice. **Material and methods:** Data were obtained from US patients receiving DFP BID between July 1st 2020–August 31st 2023. DFP exposure: time active in the registry. Frequency of adverse events (AEs) and serious AEs (SAEs) by Medical Dictionary for Regulatory Activities (MedDRA) Preferred Term was assessed. **Discussion and conclusion:** A total of 425 patients were referred to the Ferriprox® Total Care Registry. Primary