

Abstract No. **26**

Category: **Heart Failure and Cardiomyopathies**

Title: **Impact of iron overload on patients with cardiac failure**

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**Abstract:**

**Introduction:** Approximately 50% of patients with heart failure have anemia, constituting an independent predictor of adverse outcomes. The objective of this study was to determine the relationship of the ferrokinetic profile with the echocardiographic findings in patients with heart failure in a third level clinic in the Colombian Caribbean.

**Methods:** A cross-sectional study was carried out whose population under study were patients with diagnoses of chronic anemia dependent on transfusion during the years 2014-2015 who entered the emergency service. Two groups were formed: patients with and without heart failure. Sociodemographic, ferrokinetic and echocardiographic variables were evaluated.

**Results:** Forty-five patients were included. 69% corresponded to the female population. The average age was  $45.6 \pm 17.4$  years. 46.7% had heart failure and chronic anemia. Alterations in the ferric profile were observed in 55.6% of the patients. 56% corresponded to patients with heart failure and iron overload. however, no statistically significant differences were found between these alterations and the presence of heart failure. Regarding the findings in the echocardiogram, iron overload was associated with a 34% and 31% increase in right ventricular dysfunction (44% vs 10%  $p < 0.05$ ) and atrial dysfunction (36% vs 5%  $p < 0.05$ ) respectively.

**Conclusions:** The heart failure syndrome has a high prevalence in patients with chronic anemia. There is no association with the ferrokinetic profile, but iron overload was significantly associated with atrial and right ventricular dysfunction.