Are We Following AHA/ACC Guidelines for Screening and Managing Iron Deficiency in Heart Failure Patients? A Quality Assessment Project

Kandarp Suthar DO, Afif Hossain MD, Yashsavi Sharad DO, Hyein Jeon MD, Daniel Matassa MD

Department of Medicine, Rutgers New Jersey Medical School

Background: Anemia is independently associated with increased mortality and hospitalizations in patients with both heart failure with reduced ejection fraction (HFrEF) and heart failure with preserved ejection fraction (HFpEF). Studies show that iron deficiency anemi (ID) in patients with HF is associated with reduced exercise capacity, impaired quality of life (QoL), and poor prognosis independently of anemia and LVEF. As a result, the 2017 AHA/ACC guidelines recommend intravenous iron replacement in patients with NYHA class II and III HF and ID to improve functional status and QoL. Our study aims to assess optimal screening and evidence-based medical therapy for ID in HF.

Methods: Retrospective chart review of randomly selected sample of 150 patients from the ACC clinic from 1/2017-1/2022 was performed. All patients aged 18-75 with NYHA class II-IV symptoms were included and any patient with significant liver disease (I.e.) cirrhosis, ESRD, and/or active malignancy were excluded.

Results: The prevalence of anemia in our sample of 150 patients was 76%. Only 68% of the total sample was screened for iron deficiency (ID) of which 65% had ID. If the patient did not have anemia, then the screening rate for ID dropped to 42%. Once ID was identified, only 56% of eligible patients were put on iron supplementation with 95% started exclusively on PO iron while only 5% were given both PO and IV iron.

Conclusions: IDA is preventable, under-recognized and under-treated phenomena in patients with HF. Several studies provide encouraging data that intravenous but not oral iron therapy has a role in patients with HF and absolute or functional iron deficiency with or without anemia. Our study suggests that patients with HF are not adequately screened for ID regardless of anemia and are not being treated appropriately with intravenous iron therapy based on current AHA/ACC guidelines.