In-Hospital Weight Loss during Heart Failure Hospitalizations is not associated with 30-day Readmissions

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Background: Most patients with heart failure (HF) are admitted with volume overload. The mainstay of treatment remains fluid removal, measured as weight loss. We hypothesized that more effective diuresis, manifesting as greater weight loss, would be associated with lower 30-day readmission rates. Accordingly, we created a registry of patients admitted for acute decompensated HF.

Method: We performed a retrospective review of 685 patients admitted for or with heart failure with diuresis from December 2017 to May 2018 and March 2020 to August 2020. The exclusion criteria consisted of patients who 1) died during the hospitalization, 2) were treated with dialysis, 3) underwent surgery of any kind during the hospitalization, or 4) left hospital against medical advice. We collected admission and discharge labs, weight change, and 30-day all-cause readmissions.

Results: As shown below, there does not appear to be a meaningful relationship between degree of weight change and readmissions. In fact, there is a tendency for higher readmissions in the patients who lost greater amounts of weight.

Conclusion: There appears to be no correlation between weight change and 30-day all-cause readmission rates. In order to further reduce readmission rates, further studies will be needed focusing on other factors beyond degree of weight and volume removal.

