

☆ **Complex Clinical Cases**

OUTPATIENT HEART FAILURE MONITORING WITH A NOVEL CARDIAC SCALE: TRACKING VOLUME STATUS

Poster Contributions

For exact presentation time, refer to the online ACC.22 Program Planner at <https://www.abstractsonline.com/pp8/#!/10461>

Session Title: Complex Clinical Cases: Cardiovascular Team Cases Flatboard Poster Selections

Abstract Category: CVT: Heart Failure and Cardiomyopathies

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Background: There is a need for better outpatient monitoring of volume status in patients with heart failure (HF). The Bodyport Cardiac Scale measures markers of congestion and perfusion via ballistocardiography, electrocardiography, and impedance plethysmography sensors that may detect changes in volume status earlier than weight.

Case: A 66 year-old female with HFpEF (NYHA III, stage C) was hospitalized for an acute HF exacerbation. Her discharge weight was 254 lbs and the fluid component of her impedance vector was 1 standard deviation (SD) above the average of a healthy population. She was taking bumetanide 2 mg BID. On day 14 post-discharge, her fluid status exceeded 2 SDs, while her weight was 253 lbs. On day 35, her weight increased to 257 lbs and her fluid measure was 3 SDs. She reported the onset dyspnea on day 41 and edema on day 45, resulting in an increase in her bumetanide to 2.5 mg BID for 7 days. She was hospitalized on day 88 for a HF exacerbation. On day 95 her bumetanide was increased to 4 mg QAM and 2 mg QPM with an improvement in her symptoms and fluid status.

Decision-making: This case highlights that daily weight measures are a lagging indicator of subtle fluid gains. Fluid changes preceded weight increase by 21 days and may have allowed for earlier interventions. Uptitration of her diuretics resulted in a decrease in her fluid measure.

Conclusion: This case demonstrates the potential of a novel cardiac scale to monitor the volume status of HF patients and intervene sooner compared to weight or symptom changes.

