Managing Advanced Heart Failure in Hospital At Home

Matthew Erlich, MD, MPhil
Brigham and Women's Home Hospital
Harvard Medical School
Boston, United States of America

Learning Objectives

- Defend advantages of managing advanced disease at home versus inpatient
- Describe the core elements of safely managing advance heart failure in Hospital at Home

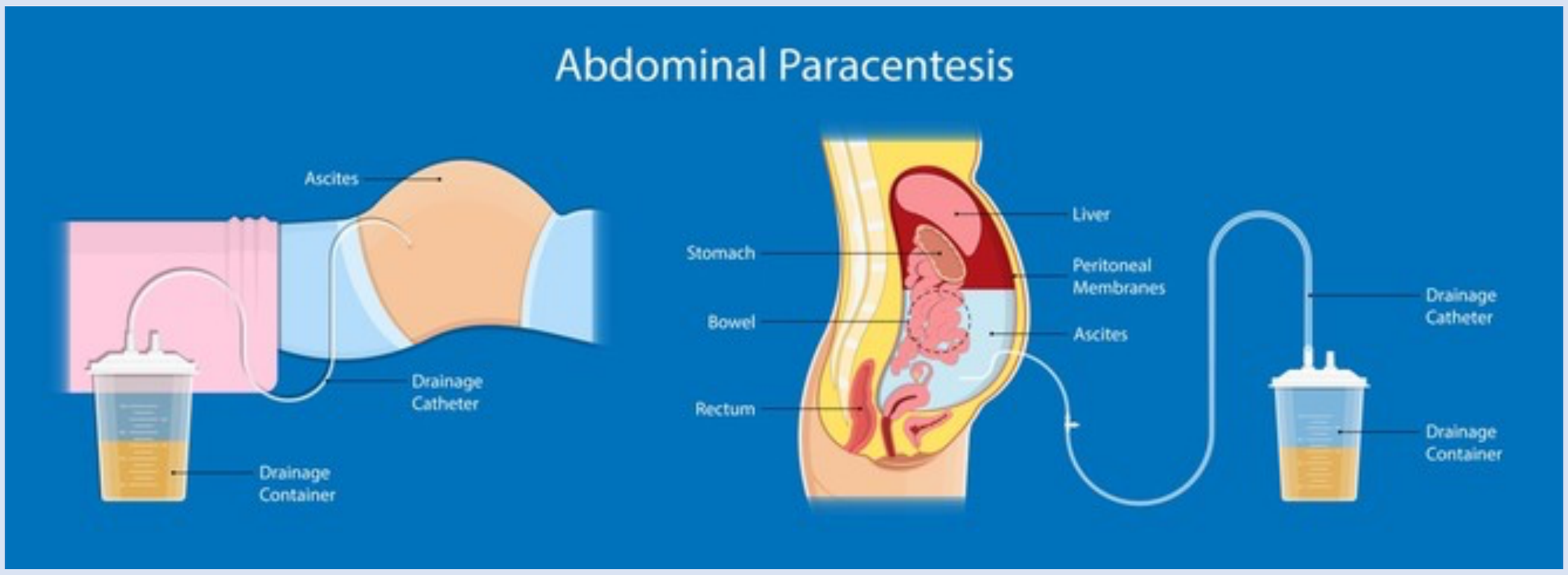
Case Description

A 62-year-old male with ischemic cardiomyopathy (LVEF 15%), with alcoholic cirrhosis and CKD was admitted to hospital at home for volume overload. Prior to admission he had several weeks of fluid accumulation refractory to oral diuretics, but expressed strong preferences against further inpatient hospitalization – in this context he was referred as a direct admission.

Initial evaluation demonstrated the patient to be 20 lbs above estimated dry weight with lower extremity and sacral edema and distended abdomen with positive fluid wave. He was initially managed with twice daily IV Lasix and transitioned to a continuous drip when his response was inadequate.

Given persistent abdominal distention, a point of care ultrasound was performed, demonstrating ~4 cm of ascites fluid on both flanks. A large volume paracentesis (LVP) was pursued. Using standard LVP kit and sterile procedure, the MD, with assistance of two RNs, inserted a catheter into the patient's right flank and removed 3070 mL of peritoneal fluid.

The patient reported significant relief of his abdominal discomfort. Diuresis also improved, possibly due to relief of intrabdominal pressure, with weight decreasing to 20 lbs below presentation weight. Due to poor prognosis of his chronic illness and desire to avoid future inpatient stay, patient opted for transition to hospice care and symptom management.



Discussion

The patient had been accumulating third space fluid for several weeks despite aggressive titration of his outpatient oral regimen. His cardiac function was progressively worsening likely due to his increased preload resulting in lower cardiac output by Starling Curve mechanism. He was also suffering from a worsening quality of life over that period with greater fatigue, abdominal pain and discomfort with corollary diminished oral intake, and depressed mood.

The patient required acute management beyond the capacity of his outpatient care team, but due to personal bad experiences in the hospital setting he was averse to readmission to the hospital. The hospital at home team was able to provide him with the full range of complex care the patient required - notably high dose diuretic infusion, frequent electrolyte monitoring with repletion, and abdominal paracentesis

This case demonstrates the capacity of hospital at home to safely treat significant complications of complex chronic disease in a way that is compatible with patients' goals of care. It also demonstrates the power of engaging with a patient in a setting in which they are comfortable and the trusting relationship that develops between a patient and provider team in such a setting.

Although the severity of his chronic disease was such that the interventions were unlikely to reverse the patient's disease trajectory or alter his life expectancy, they did result in improvement of symptoms and quality of life. By addressing these issues, the hospital at home care team was able to provide patient centered care that was consistent with his goals of care in a way that likely could not have been accomplished in a hospital setting.

Disclosures: No interests to disclose