<u>Title:</u> Pickle Juice and PleurX Catheters: Things to Avoid in a Case of Hepatic Hydrothorax

<u>Authors:</u> Christopher Awad BA, Adam Spandorfer MD, Matthew T Brown MD, and Ananth Vadde MD

Author Affiliations: Emory University School of Medicine, Atlanta, GA

<u>Introduction:</u> Hepatic hydrothoraces occur in 5-10% of patients with cirrhosis and are difficult to manage. As negative intrathoracic pressure pushes ascitic fluid through small diaphragmatic defects into the pleural cavity, a baseline disturbance in oncotic pressure in cirrhosis patients allows recurrence of pleural effusions. Management focuses on optimizing diuretics and salt/fluid intake. A surgical intervention for long-term management of Hydrothoraces are PleurX catheters, which confer increased risks of significant protein losses, renal failure, and infection/bleeding. For our patient, a careful dietary history prevented a patient from undergoing a high-risk intervention.

<u>History & Physical Exam:</u> A 55-year-old man with non-ischemic cardiomyopathy (EF 45%) and cirrhosis presented with recurrent dyspnea and abdominal distention despite three recent thoracenteses at his hometown hospital. He was referred to a tertiary care center for PleurX catheter placement. He had been taking his diuretics and recording weights religiously. Physical exam revealed dullness to percussion and decreased breath sounds in the right lower lobe, abdominal distention with shifting dullness, and bilateral LE edema.

<u>Key Investigative Studies:</u> Laboratory studies were unremarkable. Chest imaging demonstrated a large right pleural effusion. He was treated with high dose IV diuretics before undergoing a final therapeutic thoracentesis of 2.8L transudative fluid.

<u>Intervention:</u> On careful dietary review, he endorsed pickling his vegetables and drinking pickle juice regularly. Dietary counseling intervention, in cooperation with a dietician and social worker, was foundational for the interdisciplinary approach necessary to counsel the patient. With a variety of evidence-based options, our patient felt most comfortable subscribing to the "Mediterranean diet." Intervention by the primary team lead to interdisciplinary mediation.

Patient Progress & Outcomes: Our patient has had no recurrence and adheres strictly to diet.

Conclusions: Our most powerful assest in medicine is cooperation with our patients; physicians can use their approach to the interview to generate high-yield information, interpret unspoken patient concerns, and uncover unlikely habits and modes of intervention that may not traditionally be considered in acute and chronic management. For our patient, a careful review of dietary habits led to conservative management that focused on education as the primary intervention instead of surgical intervention. Lessons around expanding our differential and considering holistic evaluation promotes proper and judicious surgical intervention that portends to save patients in low-resource areas from the costly management and complications that are associated with chronic indwelling catheter placement, exacerbated for certain resource-poor populations.