



# A Rare Cause of Esophageal Varices

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## CASE PRESENTATION

### HISTORY

- A 74-year-old Caucasian male with past medical history of ESRD who was on hemodialysis for five years before a renal transplant was performed, COPD Gold Stage II, and obstructive sleep apnea presented to clinic with weight loss and dysphagia for the past year.
- The patient had no history of liver disease, physical examination was unremarkable, and his labs were normal.

### FINDINGS

- An EGD revealed one large non-bleeding esophageal varix (EV) in the mid-esophagus (Figure 1) and whitish plaques later confirmed by pathology to be Candida esophagitis.

## CLINICAL COURSE

- A CT Abdomen was unremarkable.
- To further assess the EV, a CT angiogram of the chest was obtained and revealed significant narrowing of SVC. (Figure 2).

- To evaluate the cause of SVC stenosis, an echocardiogram was ordered which revealed moderate to severe dilation of the right ventricle and evidence of pulmonary HTN deemed to be likely secondary to his COPD and OSA.
- Of note, the patient had a prior chronic hemodialysis (HD) indwelling catheter in his SVC.
- After discussion with cardiology and CT surgery, the patient was referred to cardiology for an SVC venogram and right heart catheterization to measure pulmonary pressures.

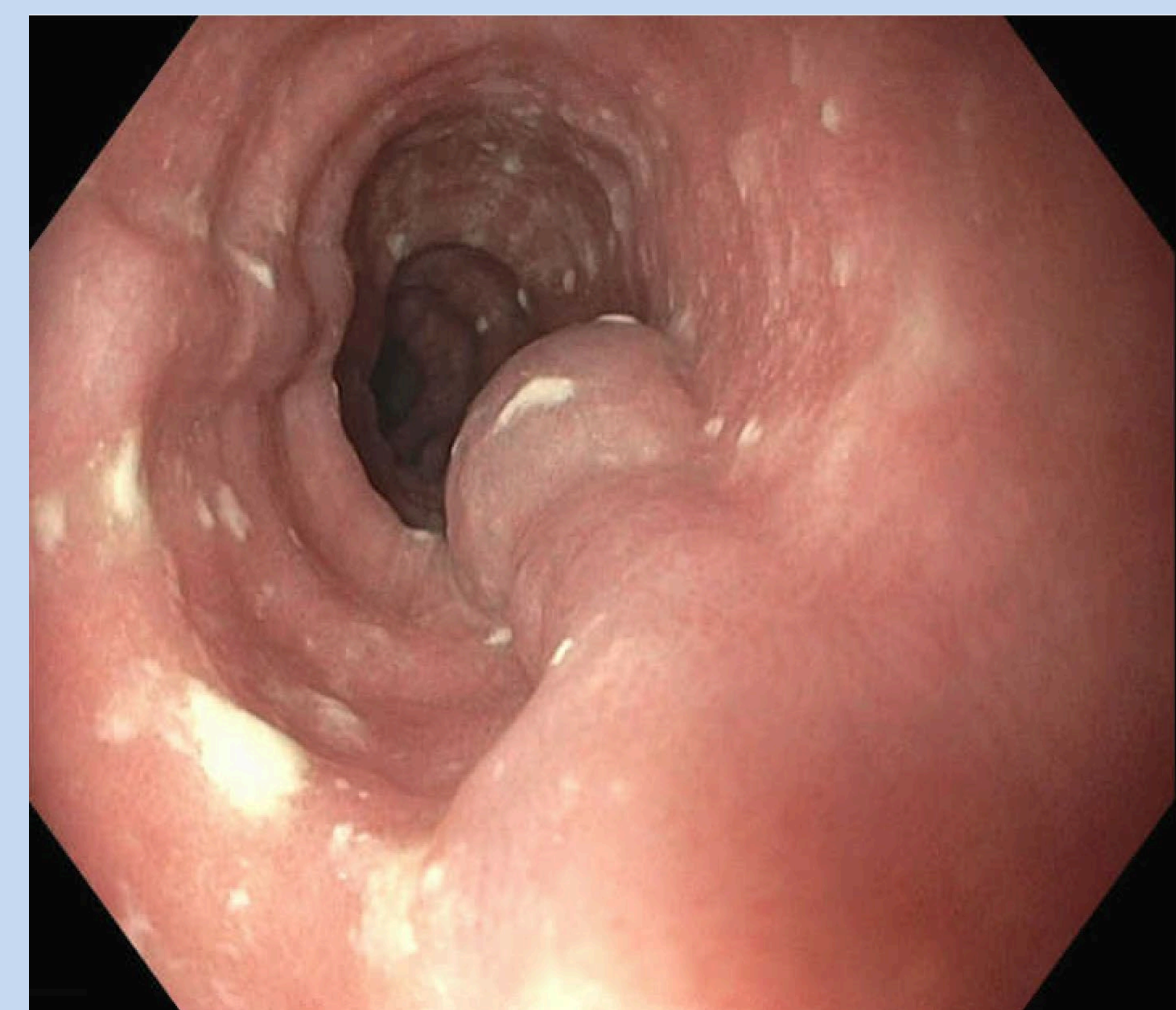


Figure 1: Varix in mid-esophagus

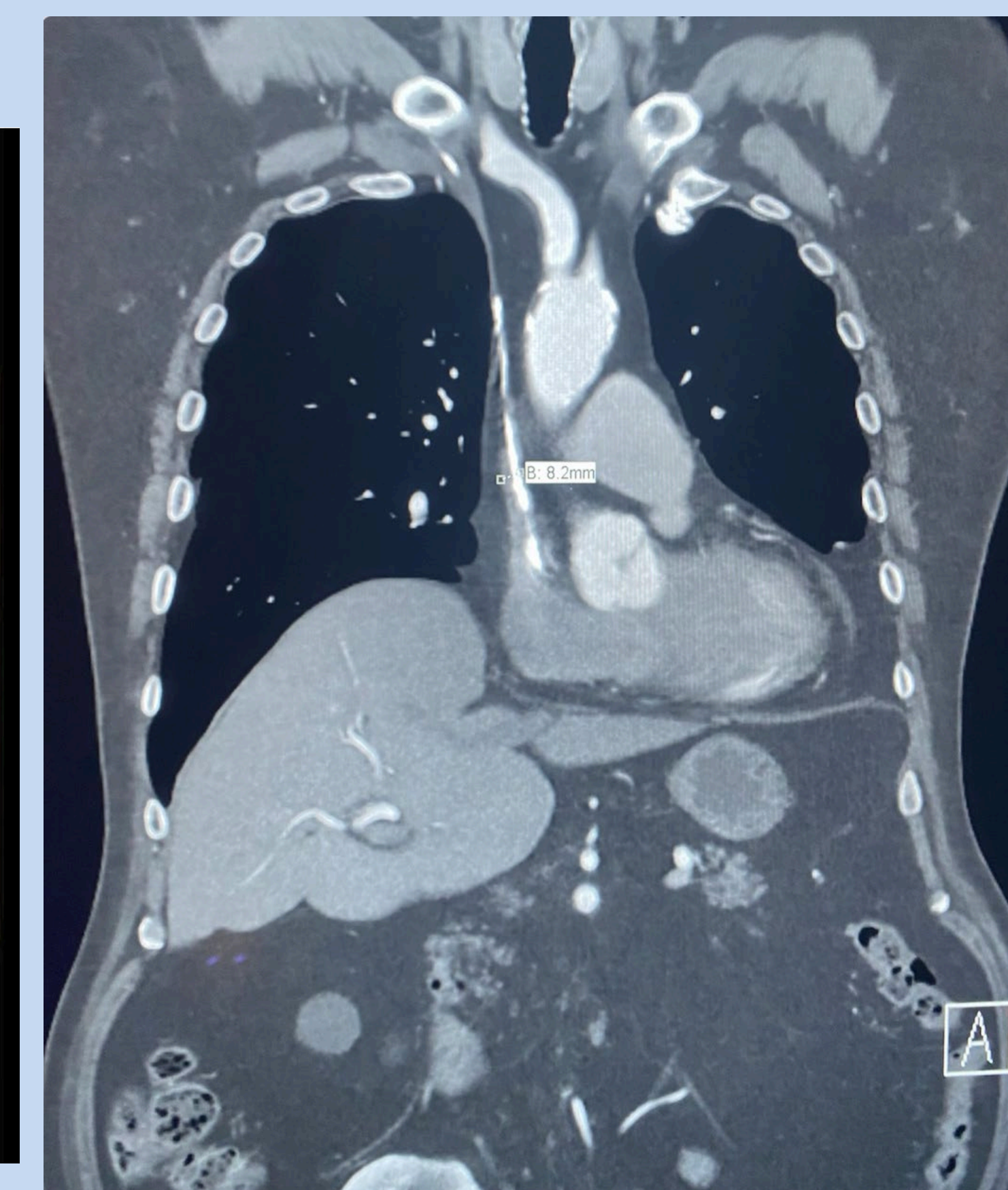


Figure 2 : Significant narrowing of SVC (red arrow)

## DISCUSSION

- Esophageal varices (EV) are classified as downhill or uphill varices.
- Uphill varices are common and found in the distal esophagus that develop secondary to portal hypertension.
- Downhill esophageal varices (DEV) are rare and found in the proximal and mid esophagus and most commonly develop from obstructed venous blood flow in the superior vena cava (SVC).
- DEV are formed when there is an obstruction in the SVC causing retrograde blood flow into the right atrium through collateral channels.
- The proximal and mid esophageal veins drain into the collaterals and the increased pressure result in DEV.
- The most common etiology is thrombosis of the SVC
- In our case, the patient's prior chronic HD catheter likely caused narrowing of the SVC lumen, along with long-standing pulmonary hypertension.
- Currently, there are no guidelines for screening or management of DEV.