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1. INTRODUCTION

- Acute esophageal necrosis (AEN) is a severe form of acute esophagitis, visualized endoscopically as dark, black-appearing distal esophageal mucosa.
- It is a rare finding, with prevalence of 0.01-0.28% of all upper GI endoscopic procedures.
- Etiology is multifactorial, with tissue hypoperfusion and compromised local protective barriers contributing to necrosis. Patients commonly present with **upper GI bleeding**. Perforation and stricture formation are important complications.
- Though direct mortality related to esophageal disease is < 6%, **around 1/3rd of patients** succumb to the underlying illness.

2. CASE REPORT

- A 60-year-old male with history of polysubstance abuse presented with coffee ground emesis and melena for 10 days.
- Found to be in septic shock, respiratory and renal failure.
- With ongoing hematemesis and agitation, he was intubated emergently, needing two pressors and CRRT.
- Transaminitis, hypoalbuminemia and coagulopathy were consistent with active alcohol use.
- UDS was positive for methamphetamine and HCV antibody was detected.
- With 1.5 L of coffee ground aspirated overnight in the orogastric tube, ocreotide and PPI infusion were initiated with concerns for a variceal bleed.

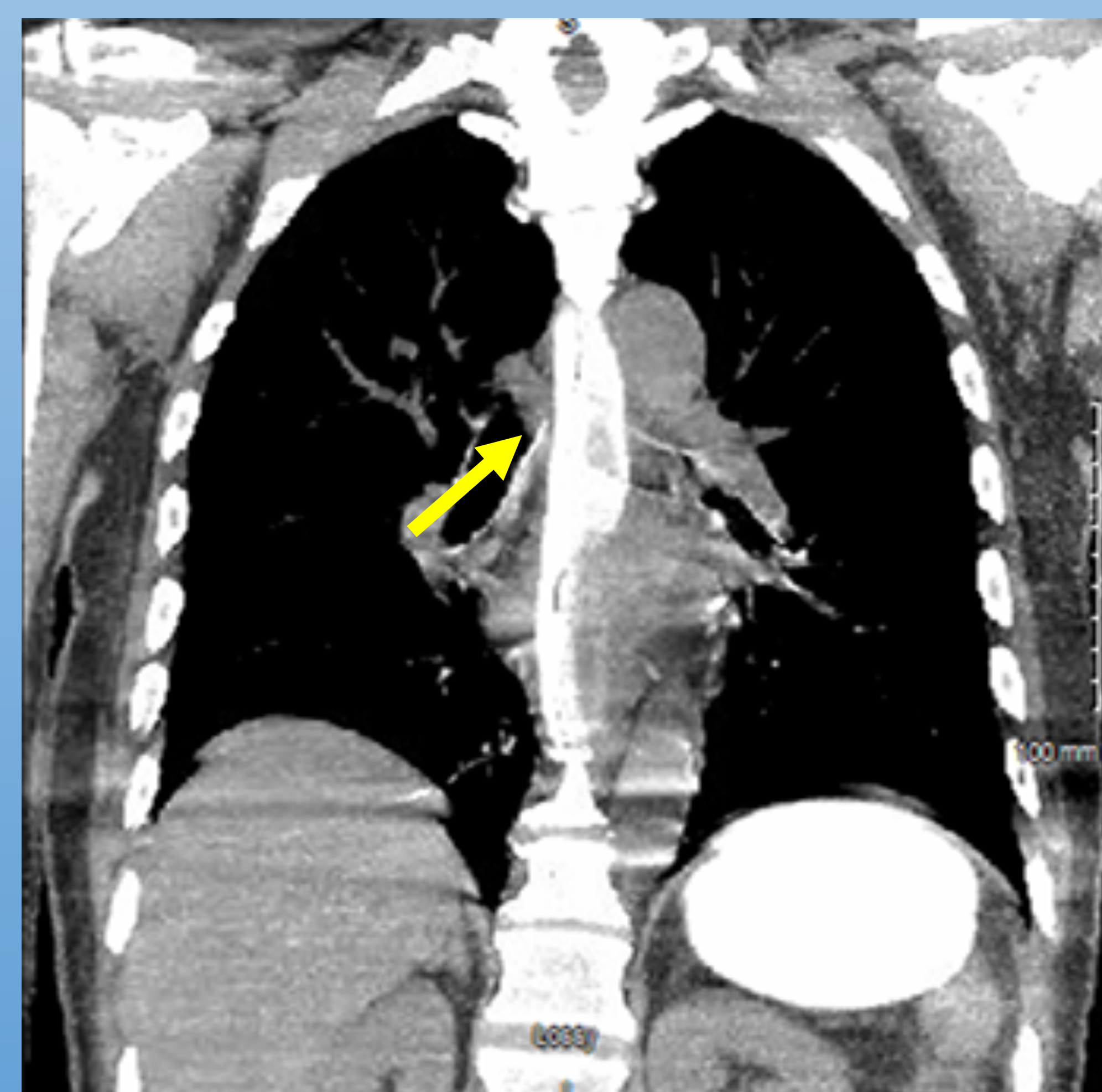


Fig A



Fig B

A: EGD showing diffuse circumferential black mucosal discoloration, consistent with AEN.

B: CT Chest without contrast showing patulous esophagus with high attenuation enteric contrast material throughout the esophagus (arrow).

Though esophageal necrosis is rare owing to the rich network of collaterals, hemodynamic changes in shock can make the mucosa more vulnerable to ischemia. Mechanical ventilation and vasoactive agents can compound these changes.

- CT chest without contrast:** Patulous esophagus with high attenuation enteric contrast material throughout the esophagus.
- EGD** revealed circumferential black mucosal discoloration in the esophagus which abruptly stopped at the GE junction, consistent with AEN. A melanotic clot was seen in the fundus but no specific bleeding site was identified.
- OGT was pulled out.
- With supportive care, the patient's improved clinically with time. He was weaned off pressors and extubated on day 7.
- Blood cultures grew *Candida*, which was suspected to have **translocated from the necrotic esophagus**. Micafungin was initiated for candidemia.
- Patient was discharged on day 16, with referral to substance rehab and hepatology for HCV treatment.

3. DISCUSSION

- Though an association has not yet been reported, methamphetamine, a known vasoconstrictor, could have precipitated AEN in our patient.
- Most cases resolve with standard of care for upper GI bleeding.
- It is important to **avoid nasogastric tubes and maintain NPO status** for at least 24 hours to avoid perforation and ensure mucosal healing.

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