Incidental Acute Esophageal Necrosis in a Post-Cholecystectomy Patient

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Introduction

- Acute esophageal necrosis (AEN) is a rare clinical diagnosis also known as *black esophagus*
- It is diagnosed by endoscopic evaluation
- Common presenting symptoms include upper gastrointestinal bleeding, epigastric tenderness, nausea, vomiting, dysphagia, or dyspepsia
- Mortality rates can be quite high, as the condition is usually associated with various co-morbid conditions (e.g. ischemic injury)

Case Presentation

A 77-year-old man with a history of COPD and CKD Stage III presents with post-prandial, RUQ abdominal pain associated with non-bloody emesis. Patient was hemodynamically stable.

Imaging

- CT abdomen: Evidence of cholecystitis with a dilated common bile duct (CBD) up to 10mm
- MRCP: Hypointense filling defect within the cystic duct and CBD

Laparoscopic Cholecystectomy

- Removal of a necrotic gallbladder
- Intraoperative cholangiogram showed stones that could not be flushed
- CBD exploration deferred due to friability of the surrounding tissue
- Brief intraoperative episode of hypotension requiring 15 minutes of phenylephrine infusion

Hospital Course and Follow-Up

Esophagogastroduodenoscopy and Endoscopic Ultrasound

- An EGD performed prior to EUS showed evidence of AEN
- EUS showed no choledocholithiasis
- Esophageal biopsies showed necrotic tissue with fibrinopurulent debris

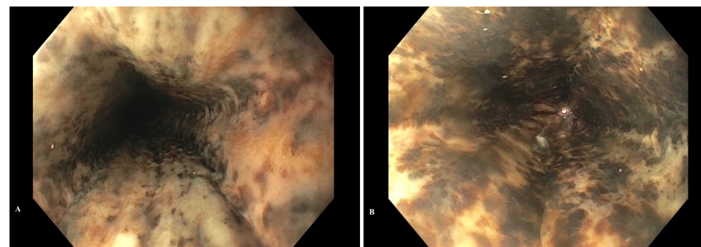

Figure A and B. Endoscopic images of the middle (A) and distal (B) esophagus demonstrating AEN and Los Angeles (LA) Grade D esophagitis.

Management

- Initiated high-dose proton pump inhibitor therapy
- Scheduled for follow-up EGD in 3 months

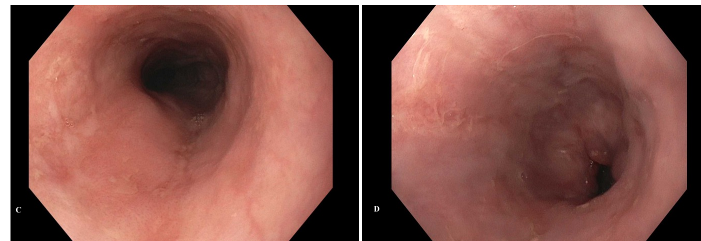

Figure C and D. Endoscopic images of the middle (C) and distal (D) esophagus on follow-up EGD 11 weeks later showing residual LA Grade B esophagitis.

Discussion

- AEN was incidentally found on EGD in this case
- Patient had no symptoms of dyspepsia, reflux, or UGIB despite the severity of esophageal findings
- This patient had multiple risk factors for AEN:
  - Male gender
  - Geriatric age
  - Chronic kidney disease
  - Post-operative status
  - Concern for ischemic injury (transient intra-operative hypotension)
- Early recognition of AEN and aggressive supportive care can improve outcomes
- Management strategies include correction of underlying risk factors and initiating PPI therapy
- A repeat EGD is recommended in all patients to evaluate for recovery and rule out development of esophageal strictures

Learning Point

For patients with risk factors for AEN, performing an EGD prior to EUS should be considered in patients even if there is no evidence of dyspepsia or hematemesis.

References

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