

Anesthesia is Not Always to Blame: Nausea and Vomiting After Esophageal Trauma from Cardiac Ablation

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Introduction

- Post-operative nausea and vomiting (PONV) is a commonly feared complication associated with anesthesia, with reported incidence from 20 to 30% of the general population.
- Timely management of PONV is essential, as it improves patient comfort and helps minimize healthcare costs.
- This case emphasizes the importance of maintaining a broad differential for PONV, particularly in patients with recent cardiac ablation, where esophageal complications may mimic PONV.

Case Presentation

- Here we present the case of a 74-year-old man with a history of paroxysmal atrial fibrillation and dysphagia who underwent pulsed field ablation under general anesthesia.
- Intraoperatively, the patient received heparin and was reversed with protamine. Baseline activated clotting time (ACT) was 120 seconds; peak intraoperative ACT reached 369 seconds; post-reversal ACT was 170 seconds.
- Postoperatively, he developed nausea and vomiting with clear phlegm, initially treated with standard PONV antiemetics.
- The patient subsequently developed hematemesis but remained hemodynamically stable
- Gastroenterology was consulted for concern of possible Mallory-Weiss tear

Management

- Endoscopy revealed blood clots along the esophageal walls; removal of clots exposed an underlying esophageal ulcer.
- The ulcer was treated with a bentonite powder for hemostasis.
- Due to the risk of rebleeding, the patient was kept intubated for airway protection.
- After absence of recurrent bleeding, he was successfully extubated.
- The patient tolerated re-initiation of anticoagulation and discharged without further episodes of bleeding.

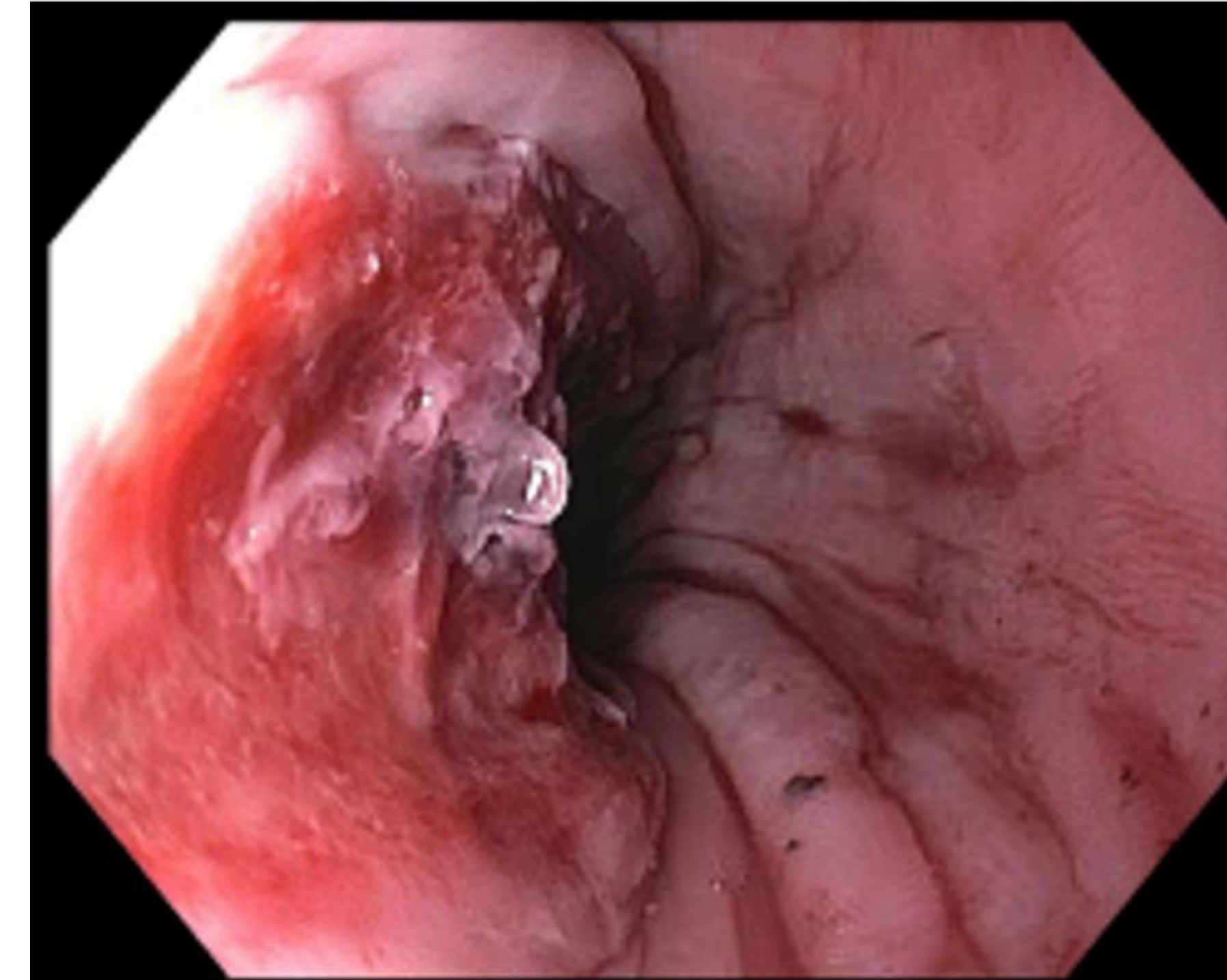


Figure 1. Distal Esophagus

Discussion

- Esophageal injury is an uncommon but serious complication of cardiac ablation, ranging from minor ulceration to atrioesophageal fistula.
- Although pulsed field ablation is safer than thermal techniques, esophageal ulceration and delayed fistula formation can still occur.
- Because the esophagus sits directly behind the left atrium, it remains vulnerable to injury during ablation.
- Systemic heparinization increases bleeding risk, and even after protamine reversal, residual effects may worsen unrecognized mucosal injury
- Early hematemesis or atypical “PONV” should prompt evaluation for esophageal complications, especially in post-ablation patients.

Differential For Postoperative Nausea and Vomiting

Procedure

- Thermal Injury
- Atrioesophageal Fistula

Medication

- Volatile Anesthetics
- Opioids

GI

- Gastroparesis
- Ileus

Metabolic

- Hypoglycemia
- Electrolyte abnormalities

Neurologic

- Increased intracranial pressure
- Migraine

Conclusions

- Anesthesiologists play a vital role in patient safety throughout the perioperative period.
- PONV’s frequent diagnosis can lead to assumptions that can delay identification and treatment of other operative complications
- Essential to balance early management of PONV with prompt recognition of more other serious complications such as esophageal injury

References

References available on request, email:
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