

An Unusual Case of Mallory-Weiss Tear Due To Foreign Body Impaction

Tommy Nguyen, DO¹ | Ashley Davis, MD² | Tatiana Teslova, MD² |

¹ Department of Medicine, Albert Einstein Medical Center, Philadelphia, PA

² Division of Gastroenterology, Albert Einstein Medical Center, Philadelphia, PA

Background

Mallory-Weiss tear (MWT) is a linear mucosal tear that occurs in the distal esophagus and/or the proximal stomach often involving the gastroesophageal junction (GEJ). It can cause upper gastrointestinal bleeding and risk factors include alcohol use, GERD, or any condition that results in sudden increase of intraabdominal pressure. MWT is self-limited and endoscopic intervention is not needed in the absence of active bleeding. We present a case of foreign body impaction resulting in an extensive MWT.

Case Presentation

A 34 year-old male with a history of hypertension presented with chest discomfort after accidentally swallowing a rib bone. He self-induced an episode of emesis to relieve the obstruction of a rib bone, followed by episodes of hematemesis associated with chest pain and odynophagia. Vital signs and physical exam were unremarkable. Initial hemoglobin (Hgb) was 16.0 gm/dl. Computerized tomography (CT) scan showed circumferential wall thickening of the esophagus, most severe at the GEJ, without esophageal rupture. An esophagram confirmed the absence of esophageal perforation. He remained stable but continued to have hematemesis with drop in Hgb to 8.4 gm/dl.

Case Presentation

Esophagogastroduodenoscopy (EGD) revealed a single 6 cm non-bleeding linear erosion in the mid and distal esophagus without GEJ involvement and two areas of non-bleeding visible vessels (NBVV) within the erosion. No intervention was done due to the absence of active bleeding. Liquid proton pump inhibitor (PPI) and sucralfate therapy was initiated. He had no further episodes of hematemesis and tolerated a soft diet at time of discharge. At his follow up he reported no further hematemesis but had odynophagia, which improved with PPI.

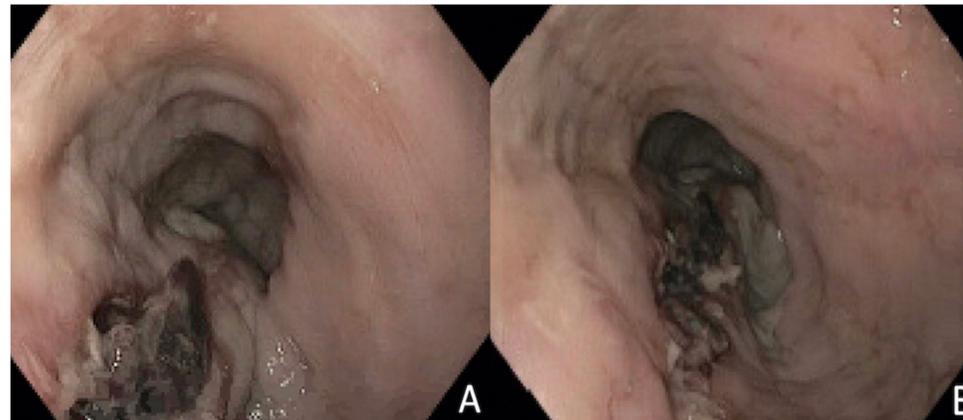


Figure 1. (A) Esophagogastroduodenoscopy (EGD) of the lower 1/3 of the esophagus with single linear non-bleeding erosion. (B) EGD showing the continuous extent of the single linear non-bleeding erosion in the mid-esophagus.

Discussion

Based on review, we believe this case is the first to report foreign body impaction resulting in a significant MWT. Interventions for MWT such as banding, hemoclipping, thermal treatment or epinephrine injection are not needed unless actively bleeding. Contrary to peptic ulcer disease, NBVV found in MWT do not require prophylactic treatment. There was debate on whether these findings warranted endoscopic treatment given the cause of the tear, notable drop in Hgb, depth of the erosion and presence of NBVV. Ultimately, medical rather than endoscopic treatment was chosen due to the absence of bleeding. This case highlights an additional mechanism of MWT and the decision to treat the case similarly to other cases of MWT despite an unusual pathogenesis.

References

1. *Food Laceration of the Esophagus: The Taco Tear - Home (AJR)*. <https://www.ajronline.org/doi/pdfplus/10.2214/ajr.140.3.503>.
2. Schlachterman, Alexander, et al. "Contained Esophageal Perforation: 'Winner, Winner, Chicken Bone Dinner.'" *VideoGIE : an Official Video Journal of the American Society for Gastrointestinal Endoscopy*, Elsevier, 29 Sept. 2017, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6003276/>.