Meat And Cola: An Esophageal Bezoar Treated by a Novel, Inexpensive Approach: Case Report and Review of Literature

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INTRODUCTION

Esophageal bezoars are seldom encountered. We report a case in which a 73 year old gentleman developed an esophageal bezoar secondary to dismotility from longstanding Parkinson’s disease. The patient was treated using cola washes through a nasogastric tube that proved efficacious and was both inexpensive and non-invasive. Few reports of this technique are found in the literature with most in relation to esophageal phytobezoars.

Report of Case

A 73 year old male, with multiple medical problems presented to the emergency department with worsening shortness of breath and subjective fever. The patient quickly developed respiratory distress requiring intubation and mechanical ventilation and was admitted under the pretense of a COPD exacerbation. Upon arrival to the ICU, multiple attempts to insert a nasogastric tube (NG) were unsuccessful. An NG tube was finally placed but became clogged. The gastroenterology consult team was able to advance an NG tube but removed it due to resistance. Upper endoscopy was performed and demonstrated a semi-solid mass of food products that coalesced to form a homogenous proteinaceous mass, which conformed to the shape of the esophagus (Image 1). The material had progressed though the lower esophageal sphincter and into the stomach. With the use of a snare, portions of the bezoar were sectioned and removed, however only a relatively small amount of the bezoar was removed. An oral esophageal tube was placed with recommendation for continuous irrigation with cola and water to soften the remaining bezoar. Repeat endoscopy 3 days later allowed for the removal of the remaining bezoar that had a proteinaceous appearance (Image 2). Esophageal biopsies taken at that time showed chronic inflammation with no evidence of esophagitis. The cola washes proved to be efficacious allowing complete removal of the foreign material. It was ascertained that the obstruction was most probably the meat-based meals that the patient was eating in the days prior.

Discussion

Esophageal bezoars are extremely rare with few reports available in the medical literature as most gastrointestinal bezoars occur within the stomach or below. Most of these reports are specific to phytobezoars that are composed of plant material and often times, a lead point may be identified.1 Esophageal bezoars are more commonly observed in: the critically ill, patients with esophageal strictures, underlying gastroparesis, achalasia, gastroesophageal reflux and following traumatic brain injury.2,3 Endoscopic evaluation with resection of the bezoar is the mainstay of treatment in most cases. Occasionally, attempts to dissolve esophageal bezoars using pancreatic enzymes or cola products have been reported and generally administered through an esophageal tube. Enteral feedings, especially feedings rich in protein are most often identified.1-4

(continued on page 48)
Meat And Cola
A CASE REPORT

In our patient, attempts to completely remove the bezoar using endoscopic methods were unsuccessful. It was then decided to attempt dissolution using cola via an esophageal tube to dissolve the remaining clumps of proteinaceous material. The ability of cola to dissolve bezoars probably stems from its carbonic and phosphoric acid components with resultant PH of around 2.5-3.0. Dissolution was accomplished in our patient after 12 hours, corresponding to the timeframe reported in similar cases. After complete dissolution, the patient was evaluated for a PEG tube placement to avoid future events as his Parkinson’s disease has progressed. This method of treatment proved to be extremely cost effective and non-invasive. In patients where endoscopic resection proves impossible or ineffective it may be feasible to use such a method to achieve resolution.

References

Image 1. Endoscopic view of the proximal esophagus with large proteinaceous bezoar after partial resection.

Image 2. Upper endoscopy of the proximal esophagus 72 hours after dissolution of esophageal bezoar.