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June 2022 Medical Image of the Month: A Hard Image to Swallow

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Figure 1. Portable chest x-ray demonstrating marked dilatation of the esophagus with food impaction and bilateral aspiration of food particles. There is also a small left pleural effusion.



Figure 2. Coronal view CT-chest/abdomen/pelvis demonstrating marked dilatation of the esophagus with food impaction seen and food particles seen in his lungs bilaterally.

Introduction

Esophageal food impactions are common occurrences in gastroenterology, however, under 20% of cases require intervention (1). The clinical condition of the esophagus and the consistency of food being swallowed contribute to the development of food bolus impactions, with patients having underlying esophageal pathology in most cases (2). Unfortunately, radiographic evidence is often difficult to obtain as food is radiolucent and poorly visualized on radiograph. Here, we demonstrate the risk associated with severe food impaction.

Case Presentation

An 86-year-old man with a past medical history of achalasia with laparoscopic Heller myotomy complicated by distal esophageal perforation, was admitted after presenting with complaints of chest pain and inability to tolerate a solid diet. Additionally, he suffered a 90-pound weight loss over 1 year. He was seen by speech therapy and provided with a dysphagia appropriate diet. Eight days into the patient stay, the family presented to the patient's bedside to assist in 1-to-1 feeding of the patient per their request. One hour following the completion of the patient's feeding, a CODE BLUE was called. The patient was unresponsive and without a pulse. PEA protocol was initiated and return of spontaneous circulation was achieved. Post intubation chest x-ray demonstrated a markedly dilated esophagus (Figures 1). Thereafter, CT chest was ordered demonstrating markedly dilated appearance of the patient's esophagus with internal food material without as a large obstructing lesion (Figure 2). This was deemed to be the cause of the patient's cardiac arrest with concomitant aspiration. Overall, the dilatation significantly progressed from previous imaging. The patient was made NPO, transitioned to total parenteral nutrition and plans were made for a follow-up disimpaction via

esophagogastroduodenoscopy (EGD). Ultimately, the patient was too unstable to pursue EGD and expired 9 days after his initial arrest.

Discussion

Through literature review, a majority of cases of food bolus impaction are self-limited. In most cases described, boluses pass on their own or with the assistance of an EGD. In most cases, underlying esophageal or motility dysfunction is known. With few case reports, food disimpaction has been assisted with cola products or nifedipine (3,4). Though trivially regarded, our case demonstrates that food bolus reveal against more gruesome esophageal pathology in both presentation, prompt intervention, and adverse outcomes.

Conclusions

We illustrate a common presentation to gastroenterologists and physicians of a food bolus impaction. Though, due to the profound radiographic presentation and severe morbidity of our clinical scenario, we hope to bring attention to the need for rapid evaluation, treatment, and consideration of adverse outcomes in patients presenting with food boluses as well as the severity and life-threatening outcomes that may preside with the previously trivially described pathology.

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