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Introduction

- Achalasia is an esophageal motility disorder that most commonly presents with dysphagia to solids and liquids, regurgitation, and heartburn over several years
- In rare instances, it can mimic the presentation of acute coronary syndrome resulting in delayed diagnosis and unnecessary interventions.
- We report a case of achalasia that presented with markedly elevated troponins, prompting extensive cardiac workup.

Case Description

- A 74-year-old female with a past history of hyperlipidemia presented with diffuse chest pain and shortness of breath for 1 day.
- Physical exam revealed tachypnea and diffuse chest tenderness. Chest X-ray showed a widened mediastinum.
- Laboratory studies revealed markedly elevated serial troponin values of 0.06 ng/ml, 0.09 ng/ml, and 1.14 ng/ml, respectively.
- EKG showed junctional ST depression and a transthoracic echocardiogram (TTE) was unremarkable.
- CT angiogram of chest and abdomen revealed megaesophagus measuring 6 cm in diameter containing a large amount of debris extending to the cervical esophagus with marked narrowing of the gastroesophageal junction.

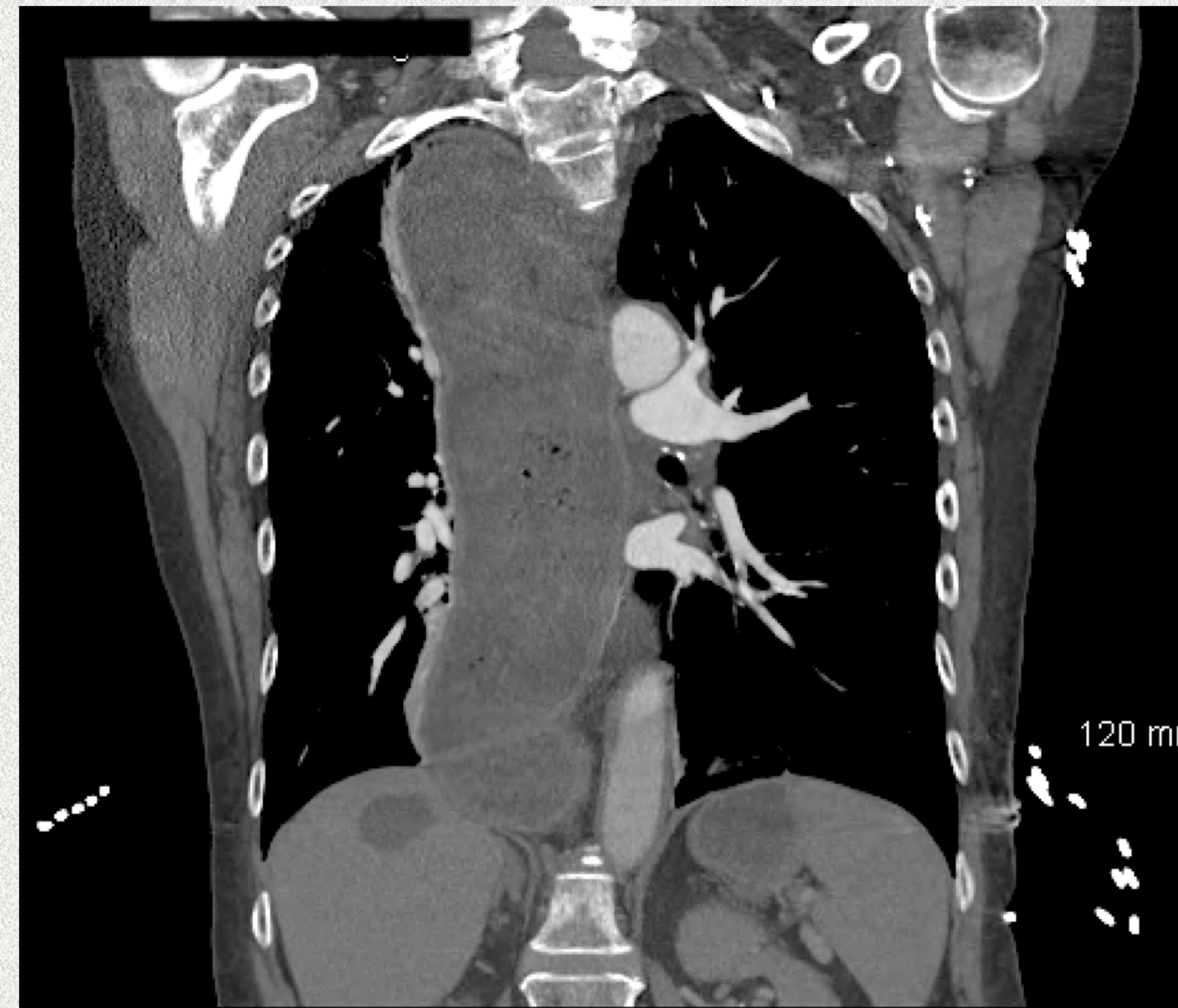


Figure 1. CT angiogram of chest and abdomen (coronal view) showing megaesophagus measuring 6 cm in diameter containing a large amount of debris.

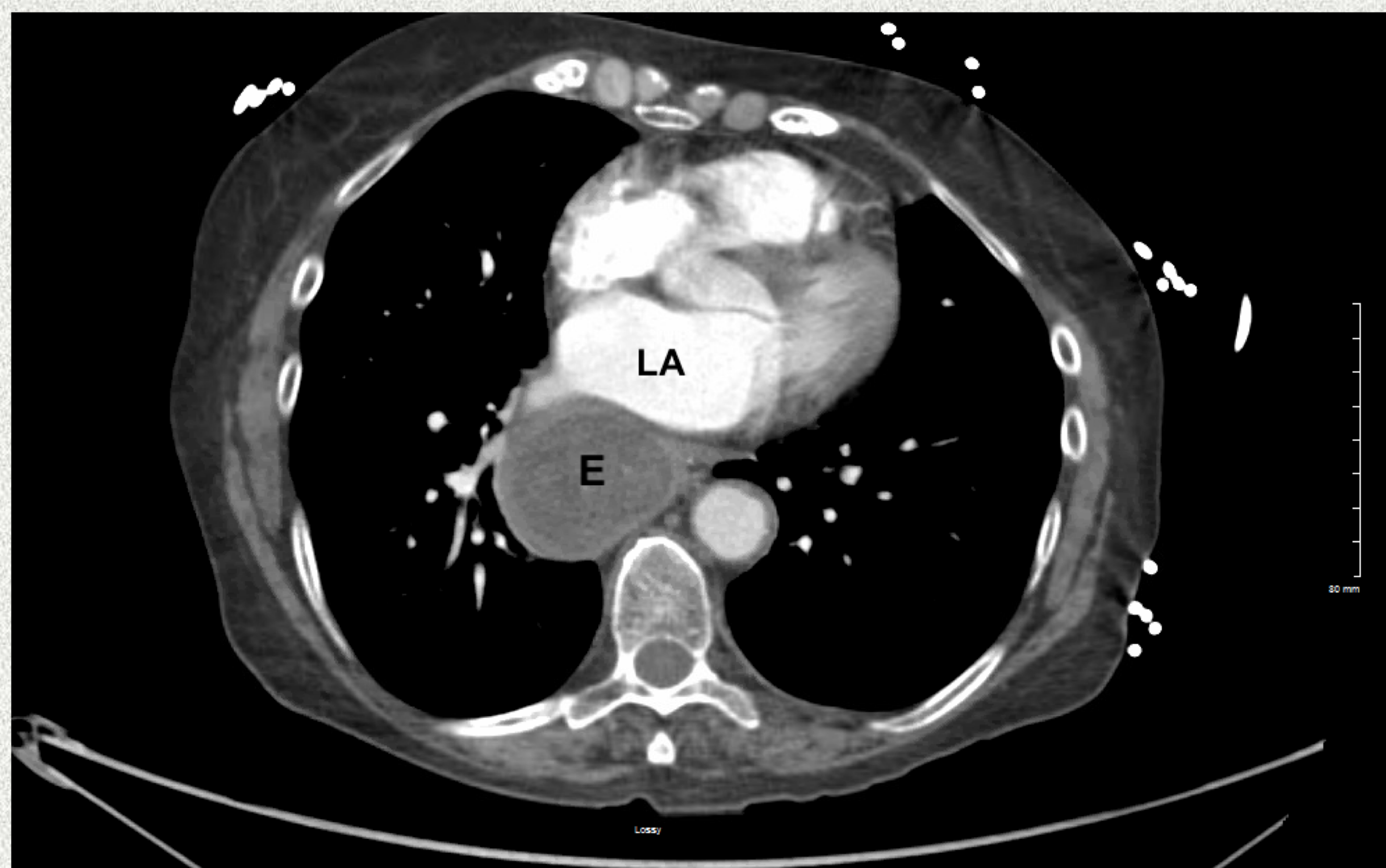


Figure 2. CT angiogram of chest and abdomen (axial view) showing dilated esophagus (E) compressing the left atrium (LA).



Figure 3. Barium esophagram showing a dilated esophagus with pooling at the distal esophagus (Bird's beak appearance).

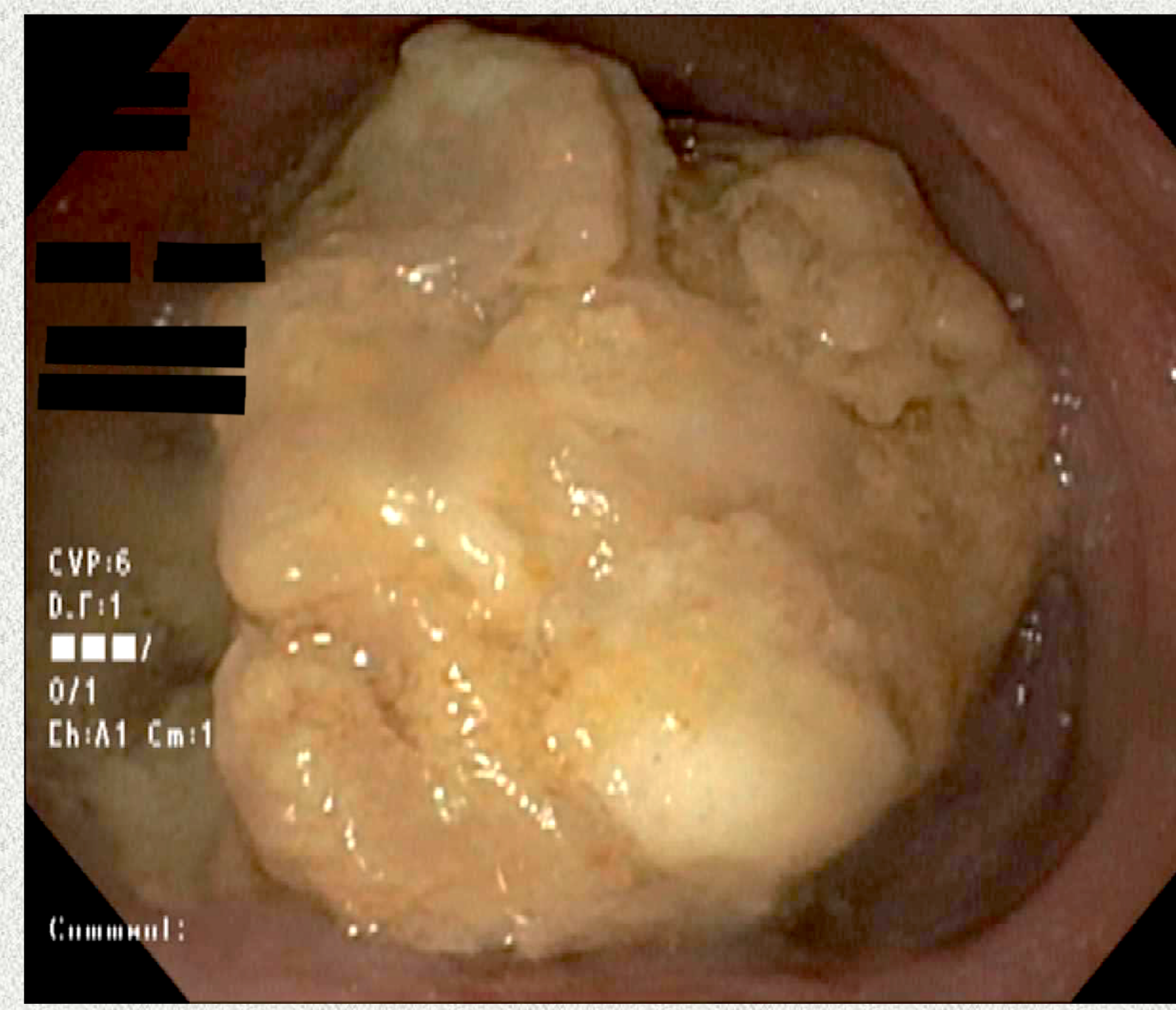


Figure 4. EGD showing dilated esophagus with large amounts of undigested food.

- EGD revealed hypertonic lower esophageal sphincter (LES), severely dilated esophagus with large amounts of undigested food.
- Undigested food was removed and Botulinum toxin was injected at the LES followed by balloon dilation. Esophageal high-resolution manometry confirmed the diagnosis of Type II Achalasia.
- Patient underwent an uncomplicated Heller myotomy with fundoplication with gradual improvement in symptoms.

Discussion

- Cardiac troponins (cTn) are sensitive biomarkers of myocardial ischemia (MI) and markedly elevated levels suggest acute thrombotic MI.
- Infrequently cTn elevation may be observed in gastrointestinal disorders such as achalasia that result in myocardial injury without ischemia.
- The likely mechanism is postulated to be significant myocardial compression secondary to the enlarged esophagus resulting in myocardial damage and troponin release.

Conclusions

- This case highlights the importance of forming a broad differential when evaluating patients presenting with elevated troponins.
- Gastrointestinal causes of elevated troponins should be considered to avoid misdiagnosis and delayed intervention once acute coronary syndrome has been ruled out.
- Achalasia is a rare gastrointestinal cause of elevated troponins.