Abstract

Case Report: A 70 year-old male presented with progressive dysphagia over 5 years, worsening over the previous year. He was able to swallow liquids and soft foods, but noted increased difficulty swallowing solids. He underwent barium contrast swallow evaluation which revealed a proximal mid-esophageal obstruction, but there were no lesions identified on endoscopic evaluation. He subsequently underwent contrasted CT scan of the head and neck which revealed a right sided aortic arch and a diverticulum of Kommerell.

The patient suffered from dysphagia lusoria caused by a diverticulum of Kommerell. A diverticulum of Kommerell, or Kommerell's diverticulum, is a congenital abnormality of the aortic arch in which a vascular ring from the aorta, usually an anomalous subclavian artery, encompasses the esophagus. Any aneurismal enlargement in the aberrant vessel can cause compression of the esophagus leading to progressive dysphagia.

Otolaryngologists are often consulted to evaluate patients with dysphagia, which can have multiple insidious causes. There is only one report of dysphagia lusoria in the otolaryngology literature over the past 50 years, and although diverticulae of Kommerell are rare, they are important causes of progressive dysphagia in adults. Once this abnormality is recognized, the patient should be referred to a cardiothoracic surgeon for evaluation and treatment, as there is a significant risk of rupture of the aneurismal aberrant vessel.

Case Report

- 70 year-old male African American Male
- Presented with progressive dysphagia over 5 years, worsening over the previous year
- Able to swallow liquids and soft foods, but noted increased difficulty swallowing solids
- Lost > 20lbs over the past year
- Drank 6-12 beers/daily and smoked 50+ pack-years
- Contrasted esophagogram evaluation revealed a proximal mid-esophageal obstruction
- No lesions identified on endoscopic evaluation by gastroenterology
- No laryngeal, bronchial, or esophageal lesions identified on panendoscopy by otolaryngology
- Presenting with progressive dysphagia over 5 years, worsening over the previous year. He was able to swallow liquids and soft foods, but noted increased difficulty swallowing solids

Findings

Figure 1: Axial contrasted CT showing the take-off of the left subclavian artery (red arrow) from the Diverticulum of Kommerell which is extending from the right-sided Aortic arch (red A)

Figure 2&3: Coronal contrasted CT showing the take-off of the left subclavian artery (red S) from the Diverticulum of Kommerell (strait red arrow on left and red D on right) from the right-sided Aortic arch (red A on right and curved red arrow on the left)

Figure 4: Sagittal contrasted CT showing the Diverticulum of Kommerell (red D) taking a retro-esophageal course, and compressing the esophagus anteriorly (red arrow showing esophagus compressed)

Discussion

- Patient suffered from dysphagia lusoria caused by a diverticulum of Kommerell.
- Dysphagia lusoria, from the English translation of the Latin term “lusus naturae,” meaning, “freak or jest of nature,” is dysphagia from extrinsic esophageal compression which is usually vascular in origin.
- The most common congenital cause is an isolated aberrant right subclavian artery.
- Less common cause is a right sided aortic arch with an aberrant left subclavian artery as was found in this patient.
- A diverticulum of Kommerell, or Kommerell’s diverticulum, is a congenital abnormality of the aortic arch in which a vascular ring from the aorta, usually an anomalous subclavian artery, encompasses and compresses the esophagus.
- Any aneurismal enlargement in the aberrant vessel can cause compression of the esophagus leading to progressive dysphagia.
- Once this abnormality is recognized, the patient should be referred to a cardiothoracic surgeon for evaluation and treatment, as there is risk of rupture of the aneurismal aberrant vessel. Ligation and bypass of the effected vessel can also alleviate dysphagia.

Bibliography