Aberrant left subclavian artery with Kommerell’s diverticulum: Presentation with dysphagia lusoria in elderly patient

Clinical History:
A 61-year-old male was admitted to the hospital with dysphagia to solids lasting for several years.

Imaging Findings:
A 61-year-old male was admitted to the hospital with dysphagia to solids lasting for several years. MDCT angiography was performed in order to rule out the vascular compression and other extrinsic etiologies.

Discussion:
MDCT angiography showed right aortic arch with the order of the aortic arch branches as left common carotid, right common carotid, right subclavian, and left subclavian arteries from proximal to distal in both cases. Kommerell’s diverticulum was shown at the aberrant left subclavian artery origin. Moreover, MDCT showed the indentation of Kommerell’s diverticulum on osephagus without a patent ductus arteriosus. Right aortic arch with an aberrant left subclavian artery represents only 3% of aortic arch malformations. Diverticulum at origin of aberrant left subclavian artery known as Kommerell’s diverticulum (1). The presence of a ductus arteriosus or a ligamentum arteriosum between the left subclavian artery and the left pulmonary artery results in a vascular ring that is generally loose. Therefore, symptoms of tracheal or esophageal compression are often mild or absent (2). In an older patient with a more rigid trachea, the characteristic symptoms are derived from the esophageal compression caused by the aberrant artery. Typical presentation with dysphagia to solids as in the case we present, termed as ‘dysphagia lusoria’(1). In elderly patients, although dysphagia is usually caused by malign pathologies, vascular etiologies should also be considered in differential diagnosis. Cina et al have recently reviewed this rare entity, and reported that the operative mortality for elective surgical treatment of Kommerell’s aneurysm with right aortic arch was 8.3% and 18% for aneurysms associated with dissection. Therefore, authors concluded that aggressive treatment could be applied for low-risk patients with aneurysms 3 cm or greater in diameter (3). Angiography is still considered to be the gold standard in diagnosis of these patients. However, it must be reserved for those patients who are destined to receive surgical intervention, and non-invasive methods such as MDCT and MRA should be preferred in initial diagnosis and follow up of these patients. Besides, MDCT and MRA have advantages over angiography not only for showing the relation between the diverticula and the soft tissues particularly trachea and esophagus but also
excluding other extrinsic pathologies that can explain patient’s symptoms.

**Differential Diagnosis List:** Kommerell’s diverticulum

**Final Diagnosis:** Kommerell’s diverticulum

**References:**


Description: MDCT angiography shows right aortic arch and the order of the aortic arch branches are left common carotid (black arrowhead), right common carotid (white arrow), right subclavian (white arrowhead), and left subclavian arteries (black arrow) from proximal to distal. Origin:
Description: MDCT angiography shows Kommerell’s diverticulum (arrows) in the aberrant left subclavian artery origin. Origin:
Description: Axial Thorax CT image shows compression of Kommerell’s diverticulum on oesophagus (arrow). Origin: