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Interesting Image / İlginç Görüntü

A complex aortic arch anomaly: A rarely seen image

Kompleks arkus aort anomalisi: Nadir görülen bir görüntü

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A 56-year-old female patient was admitted to our hospital with cough and mild dyspnea during daytime. She was previously admitted to neurology and orthopedics clinics several times with left arm pain. After physical examination and basic clinical assessment, a contrasted computed tomography of the chest was performed which revealed a complex aortic arch anomaly. The first branch of the arch was the trunk of bilateral common carotid arteries and, just before the joint of the aortic arch and descending aorta, the Kommerell diverticulum (KD) was visible. In the 6-cm distal the origin of left subclavian artery (LSA), there was 140° fold in the route of the LSA. There was an aortic coarctation resulting in 20% aortic stenosis in size (Figure 1). The third branch of the aortic arch, aberrant right subclavian artery (ARSA), was arising from the medial part of the coarctated part of aorta, reaching the right arm after a retrotracheal route (Figure 2).

Aortic arch anomalies are rarely seen congenital vascular diseases and most of them are simple in nature.[1,2] They are mostly diagnosed in the latter periods of life, when arteries become aneurysmal.[2] The main symptoms include dyspnea, dysphagia due to compression over the adjacent tissues, and associated symptoms due to malperfusion of the related body parts.[3] The ARSA is the most common arch anomaly and may present with dysphagia lusoria due to the posterior compression of esophagus by the aberrant artery. Known as an asymptomatic anomaly, it may also present with the right arm symptoms. Kommerell diverticulum which seems to be the most problematic component of this case is rarely seen and is asymptomatic in the majority of patients. The major complications of KD are dissection, rupture, and embolic phenomena of the affected arterial structure. Surgery is still the first-line treatment option, although

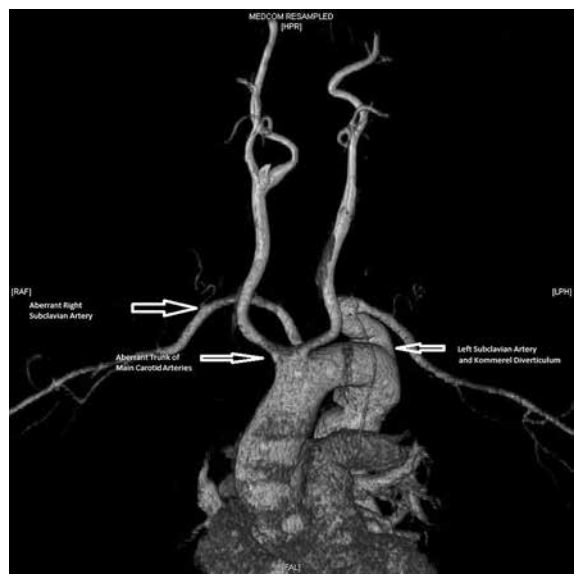

Figure 1. Aorta and arch branches on contrasted computed tomography; anterior sight of three-dimensional reconstruction.

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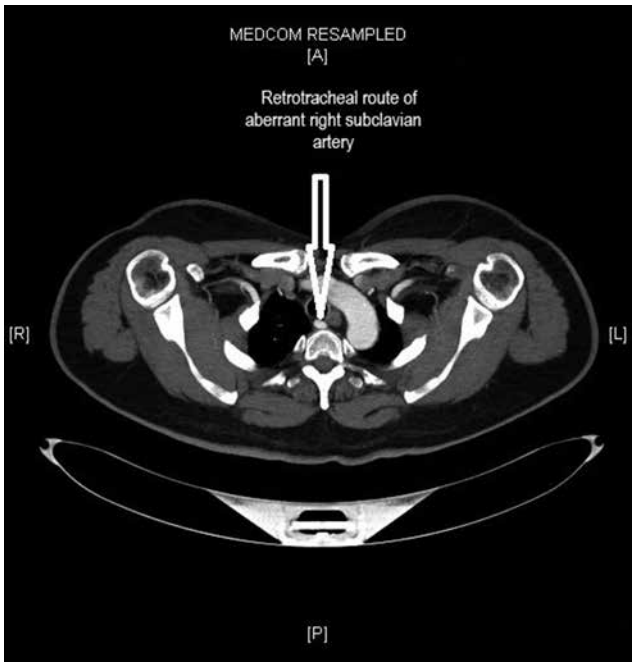

Figure 2. Retrotracheal route of aberrant right subclavian artery on contrasted computed tomography; sagittal section.

there is no consensus in the treatment guidelines for patients with both asymptomatic arch anomalies and anomalies presenting with complications.[4]

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