Right Aortic Arch with Aberrant left Subclavian Artery

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The patient, a 53 year old man, presented at Sultan Qaboos University Hospital, Oman, with a history of abdominal pain and alternating constipation and diarrhoea. A
colonoscopy and a barium enema revealed a short segment of annular narrowing and a large polypoid mass in the rectodigmoid region. Subsequent histopathology identified a moderately differentiated adenocarcinoma. Computed tomography (CT) scans of the thorax and abdomen were carried out as staging procedures. The CT of thorax demonstrated a right aortic arch. The left common carotid artery, the first major artery to arise from the arch, is followed by the right common carotid, right subclavian and left subclavian arteries. The aberrant left subclavian artery takes its origin from a prominent Kommerell’s diverticulum at the distal end of aortic arch. The descending aorta continues inferiorly to the right side of the vertebral column. The findings are consistent with a right arch of aorta with aberrant left subclavian artery [Figures 1 and 2].

Approximately 0.1% of population has a right sided aortic arch, and about half of these have an aberrant left subclavian artery which may arise either directly from the aorta or from the Kommerell’s diverticulum. Although an aberrant left subclavian artery may occur in isolation, it is the commonest anomaly associated with a right aortic arch. Any symptoms, which result from an aberrant left subclavian artery, are associated with compression of the esophagus or trachea and are most likely to occur if its origin is dilated.

REFERENCES