

Anomalous Origin of the Left Vertebral Artery - A Case Report

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The vertebral artery is the first branch of the ipsilateral subclavian artery. During its cervical course, the artery presents a prevertebral segment and enters the foramen transversarium of the sixth cervical vertebra. We present an anomaly found during routine dissection where the left vertebral artery originated from the arch of aorta in between the origins of left common carotid artery and the left subclavian artery in a 50 year old Sri Lankan male cadaver. In its cervical course the vertebral artery ascended anterior to the seventh to fifth cervical vertebra and entered the foramen transversarium of fourth cervical vertebra. The right vertebral artery was normal, originated from right subclavian artery. Anomalous origin of the left vertebral arteries is not very common; most types have been published in a few case reports. In large autopsy series, the reported prevalence of origin of the left vertebral artery directly from the aortic arch varies from 2.4 – 5.8 %. To the best of our knowledge this is the first report of anomalous origin of vertebral artery from aorta in a Sri Lankan. The arch of aorta has a composite origin; it develops from the aortic sac, left 4th aortic arch and part of the left dorsal aorta. In the present case the stem of the 7th cervical intersegmental artery also has been incorporated to form part of the arch of aorta, which ended in the origin of left vertebral artery from the aortic arch. Even though vertebral artery origin variants are mostly incidental findings, knowledge of these variations appears to be mandatory for planning aortic arch surgery and endovascular interventions and for conventional angiography.

Keywords: Anomalous origin of left vertebral artery, Arch of aorta, Foramen transversarium