

Anomalous branching pattern of the aortic arch associated with retroesophageal right subclavian artery

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During dissection practice for the students at the University of Brescia, we found an anomalous branching pattern of the aortic arch in a female cadaver. Aberrant right subclavian artery originating from the distal part of the aortic arch and following retroesophageal course was recognized; next to it, the left subclavian artery and, proceeding from the left to the right, the left common carotid artery and the right common carotid artery branches, respectively. Anomalous origin of the vertebral arteries was also noted; the left vertebral artery originated directly from the aortic arch, closed to the origin of the left common carotid artery, whereas the right vertebral artery originated from the right common carotid artery.

Even if, in the literature aberrant right subclavian artery is reported as a relatively rare aberration in the general population with a female predominance [1-2], the concomitant anomalous branching pattern of the aortic arch and, in particular, the origin of the vertebral arteries, represents a rare case that appears interesting to describe. Therefore, this case report alerts anatomists and clinicians to the possibility of these simultaneous variants.

References

- [1] Nakatani et al. (1996) Retroesophageal right subclavian artery originating from the aortic arch distal and dorsal to the left subclavian artery. *Ann Anat* 178: 269.
- [2] Natsis et al. (2017) The aberrant right subclavian artery: cadaveric study and literature review. *Surg Radiol Anat* 39: 559.

Key words

Retroesophageal subclavian artery, aortic arch, vertebral arteries, dissection.