Bilateral variation in the origin of suprascapular artery

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Introduction
Suprascapular artery (SSA), a branch of thyrocervical trunk, which in turn is a branch of subclavian artery, usually passes laterally across the anterior scalene muscle, phrenic nerve, posterior to the internal jugular vein and sternocleidomastoid, then crosses anterior to the brachial plexus and subclavian artery [1]. On reaching the superior border of scapula it passes above the transverse scapular ligament, while the nerve passes below the ligament [1]. Variations in the origin of branches of subclavian artery and thyrocervical trunk have been reported by many researchers [2–6]. In the present case a bilateral variation in origin of SSA was found.

Case Report
The bilateral origin of the SSA from the first part of the axillary artery was observed during routine dissection of a nearly 65-year-old male cadaver. SSA on both sides ascended for about 1 cm above the medial third of clavicle and then passed obliquely behind the clavicle, it then passed between the trunks of the brachial plexus to reach the suprascapular notch, where it was accompanied by the suprascapular nerve and both together passed beneath the transverse scapular ligament and took part in the anastomosis around the scapula.

Discussion
Variations in the origin of SSA have been described by earlier researchers [2–6]. The passage of both the nerve and the artery below the transverse scapular ligament is also reported in numerous cases [2, 3]. The origin of SSA on the left side from the first part of axillary artery is rare and was reported in one of the cases studied by Misra and Ajmani [2]. Mahato reported a bilateral variation of SSA, where the SSA arose from the third part of axillary artery [3]. However, the bilateral origin of the suprascapular arteries from the first part of the axillary artery makes this case unique and interesting. SSA arising from the third part of subclavian artery has been reported earlier in 22% [4] and 28% [5] cases. SSA arising from internal thoracic has been reported earlier in 10% [4] and 5% [5] cases.

Conclusion
The variation in the origin of the SSA is important, as damage to this artery can lead to microemboli in the vasa nervosum...
Bilateral variant suprascapular artery, which may lead to suprascapular neuropathy [6]. SSA has a major contribution in blood supply to the tendinous rotator cuff of shoulder joint, chiefly to the supraspinatus muscle [7]. Hence understanding the origin and branching pattern of SSA would help in the management of diseases of cervical and shoulder region that could be due to vascular origin.

References


