

MAPING THE SUPRASCAPULAR NOTCH TOPOGRAPHICAL VARIATIONS AS A GUIDANCE TO ULTRASOUND IMAGING

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INTRODUCTION

Vascular variations around the suprascapular notch have been reported throughout the literature; however, a specific map has not yet been established and controversies on the extent of variability remain. The suprascapular artery may travel under the suprascapular ligament within the suprascapular notch. The suprascapular vein has also been observed to be highly variable. This variation forms obstacles during ultrasound assessments.

PURPOSE

To map the vascular variation within the suprascapular notch.

MATERIALS & METHODS

Observational study on 77 cadaveric prosections (30 bilateral on full body, 24 right free limbs, 23 left free limbs).

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- Vascular variations were observed and recorded schematically.
- Suprascapular nerve and vessels diameter were measured.

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RESULTS & DISCUSSION

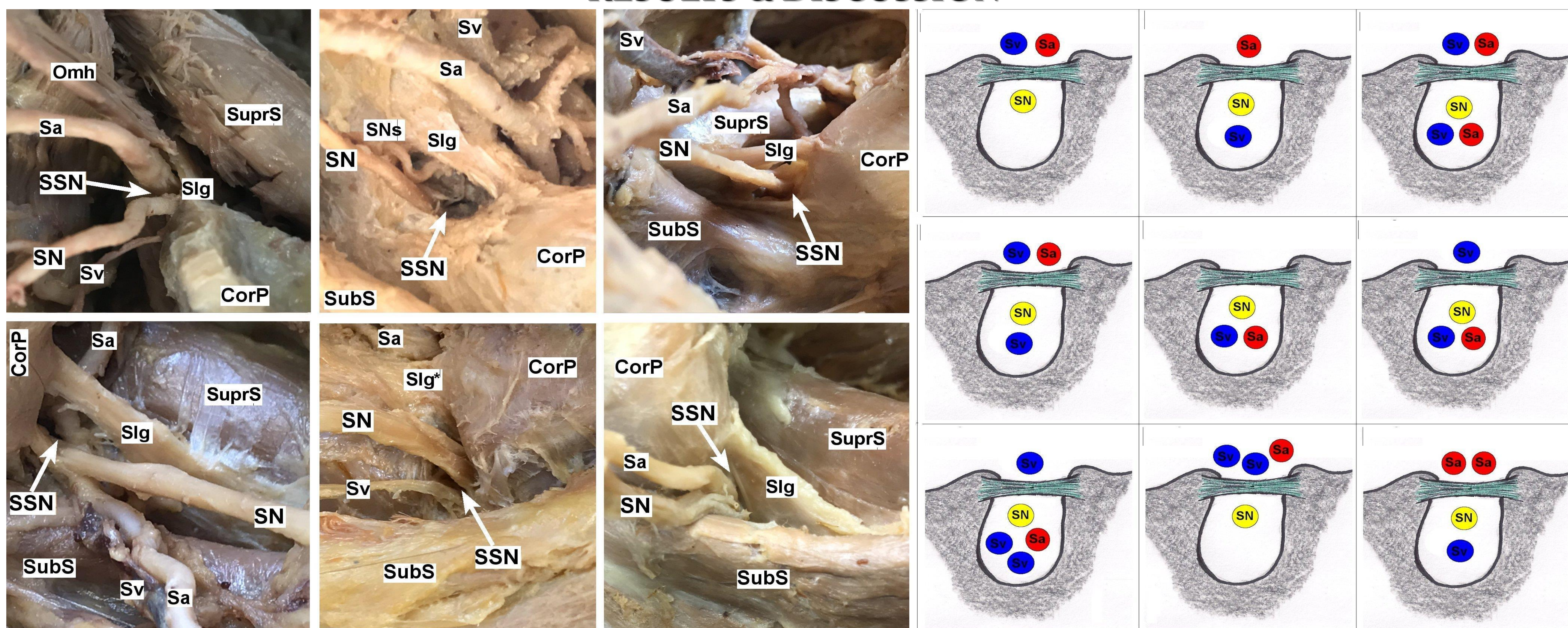


Figure. The suprascapular notch topography. SSN- suprascapular notch, Slg- suprascapular ligament, SN- suprascapular nerve, SNs- suprascapular nerve sensory branch, Sa- suprascapular artery, Sv- suprascapular vein, SuprS- supraspinatus muscle, SubS- subscapularis muscle, Omh- omohyoid muscle, CorP- coracoid process.

- The suprascapular nerve of 2-3 mm in diameter constantly passed through the suprascapular notch in all cases.
- Six suprascapular notches (12 pairs) had a symmetrical morphology.
- Nine suprascapular (18 pairs) notches had an asymmetrical morphology.
- Nine variants of vascular topography were observed.

Suprascapular artery (0-2 found around the SSN)				
	Passing only inside SSN (0-1 SA)	Passing only outside SSN (0-2 SA)	Passing both inside & outside the SSN	Absent
SA diameter	1-4 mm	1-5 mm		
Number of cases	16	52	3	6
Suprascapular vein (1-3 found around the SSN)				
	Passing only inside SSN (0-2 SV)	Passing only outside SSN (0-2 SV)	Passing both inside & outside the SSN	Absent
SV diameter	0.5-5 mm	1-7 mm		
Number of cases	11	44	18	0
No. 77 suprascapular notch				

The six cases of absent suprascapular artery could mean that the supraspinatus muscle may receive varying blood supply from the subscapular artery or dorsal scapular artery since it is known to form anastomoses.

CONCLUSION

The documented variant combination throughout the literature does not accurately represent this disparity. A further cadaveric investigation is needed to meet a statistical significant report.

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