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Teaching Images

OXFORD

CLINICAL PERSPECTIVES

Dynamic ultrasound examination painting the picture of omohyoid muscle strain and associated suprascapular nerve entrapment

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A 31-year-old woman experienced sudden left neck pain during side plank exercise. Despite oral analgesics, her pain worsened especially when swallowing or speaking loudly. Compared to the right side, the ultrasonography of the superior belly of her left omohyoid muscle was thickened with blurred fibrillar arrangement (Figure 1A) and intramuscular vascularity (Figure 1B). Upon dynamic assessment, her neck pain radiated to left shoulder as the swollen omohyoid muscle glided over the suprascapular nerve (Figure 2, Video S1). She was diagnosed with omohyoid muscle strain and referred for physical therapy. After 2 weeks of treatment, her symptoms completely resolved.

Ultrasound imaging is useful for visualizing the omohyoid muscle and associated neural structures.[1] The examination can be initiated by placing the transducer in the axial plane between the submental and upper cervical region, where its superior belly can be observed emerging from the interfascial plane between the sternohyoid and thyrohyoid muscles.[2] As the transducer is moved laterally and towards the suprascapular fossa, the superior belly can be seen coursing underneath the sternocleidomastoid muscle, gradually becoming the intermediate tendon. At the mid-clavicle level, the inferior belly arises and can be traced down to its attachment next to the suprascapular notch.

Supplementary material

Supplementary material is available at *Pain Medicine* online.

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Data availability

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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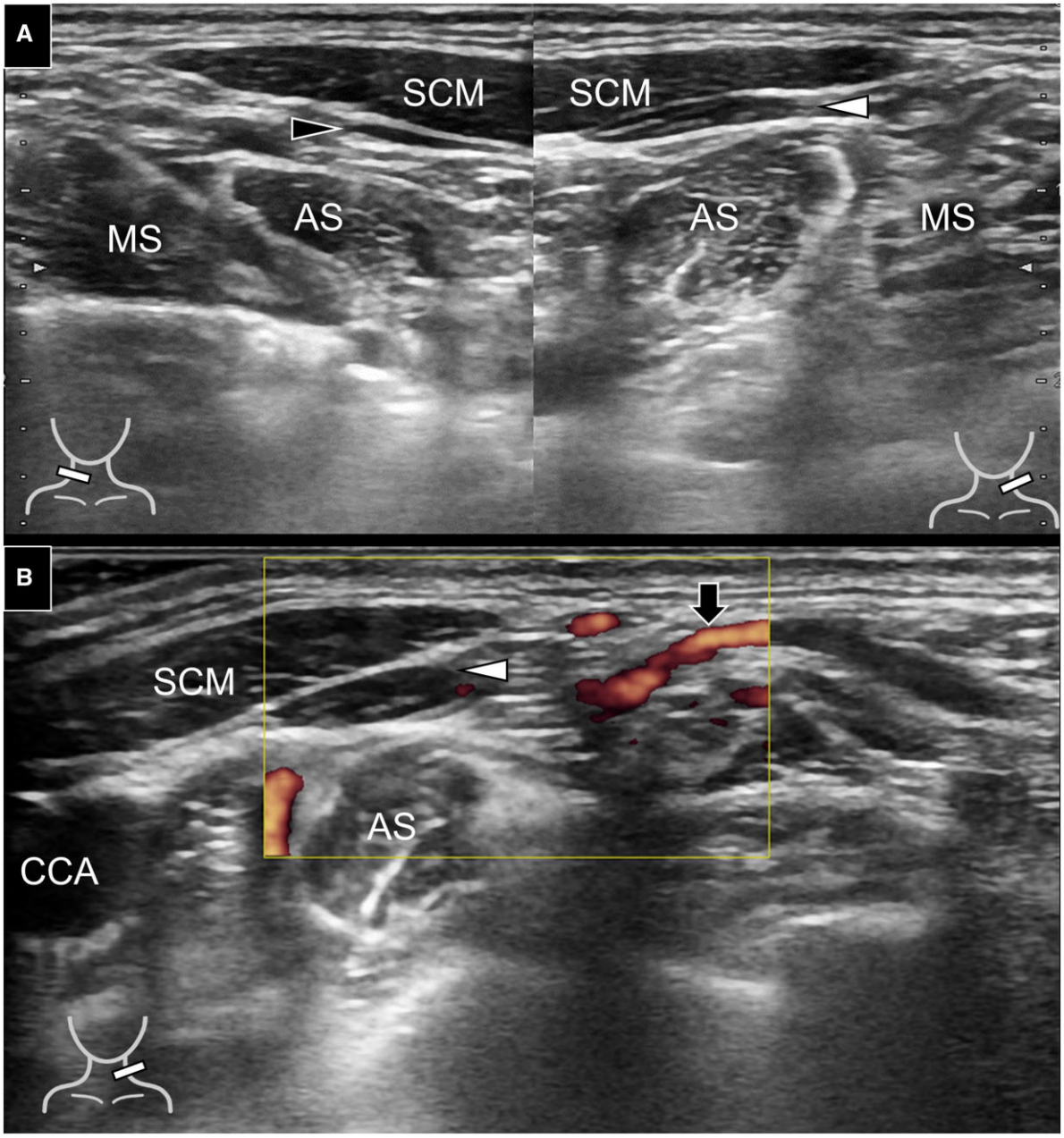

Figure 1. (A) Comparative ultrasound imaging of normal *(left subgraph, black arrowhead)* and swollen *(right subgraph, white arrowhead)* omohyoid muscles. **(B)** Mild vascularity of the swollen omohyoid muscle (*white arrowhead*) on power Doppler imaging. Black arrow, transverse cervical artery.Abbreviations: AS, anterior scalene muscle; CCA, common carotid artery; MS, middle scalene muscle; SCM, sternocleidomastoid muscle.

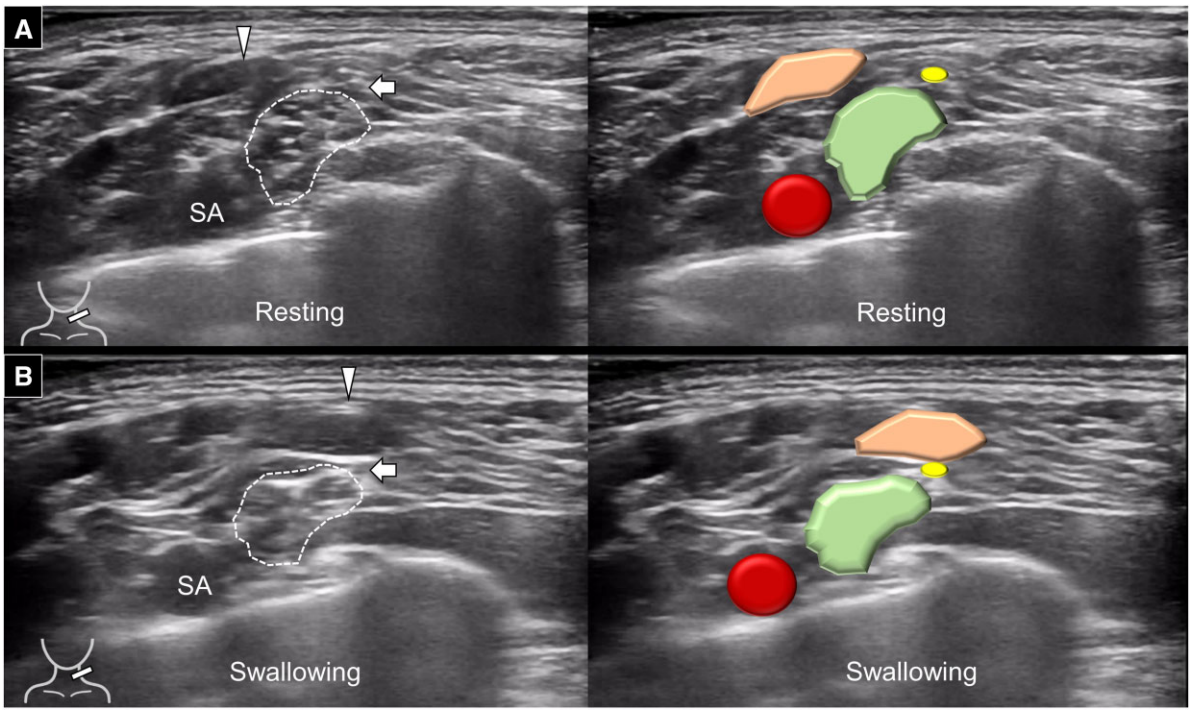

Figure 2. Ultrasound imaging and schematic drawing of the suprascapular nerve *(white arrow, yellow color circle)* and omohyoid muscle *(white arrowhead, orange color block)* during **(A)** resting and **(B)** swallowing. SA and red color circle, subclavian artery; dash-lined region and green color region, brachial plexus.