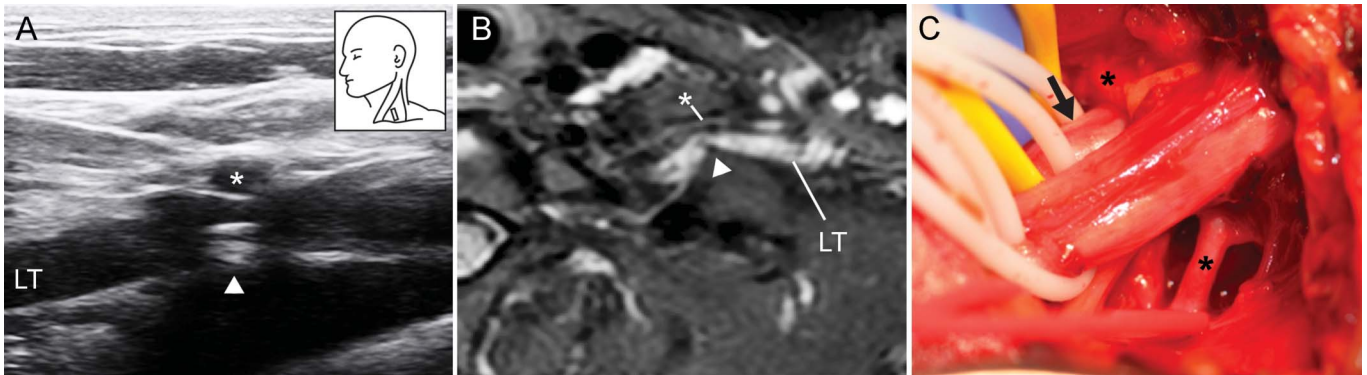


# Sonographic diagnosis of true neurogenic thoracic outlet syndrome

**Figure** Imaging findings in true neurogenic thoracic outlet syndrome



Correlation between ultrasound (A) and MRI (B) demonstrates compression of the lower trunk (LT) between an artery (\*) and fibrous band (arrowhead) arising from an elongated C7 transverse process. At operation (C), the artery (\*) passed between the middle and lower trunks. Fibrous bands were resected to release the LT (arrow).

A 32-year-old woman presented with a 5-year history of left shoulder pain, medial hand and forearm numbness, and progressive hand weakness and atrophy. Electrodiagnostic studies were characteristic of true neurogenic thoracic outlet syndrome,<sup>1</sup> and a chest x-ray showed bilateral elongated C7 transverse processes. High-resolution ultrasound studies revealed compression of the left lower trunk (LT) between a fibrous band and artery (figure, A). Magnetic resonance neurography (figure, B) and operative exploration (figure, C) confirmed the ultrasound findings. Clinical improvement was noted following surgical neurolysis of the LT. High-resolution ultrasound may be a useful and quick bedside tool to identify causative structural pathology in this classic neuromuscular disorder.

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