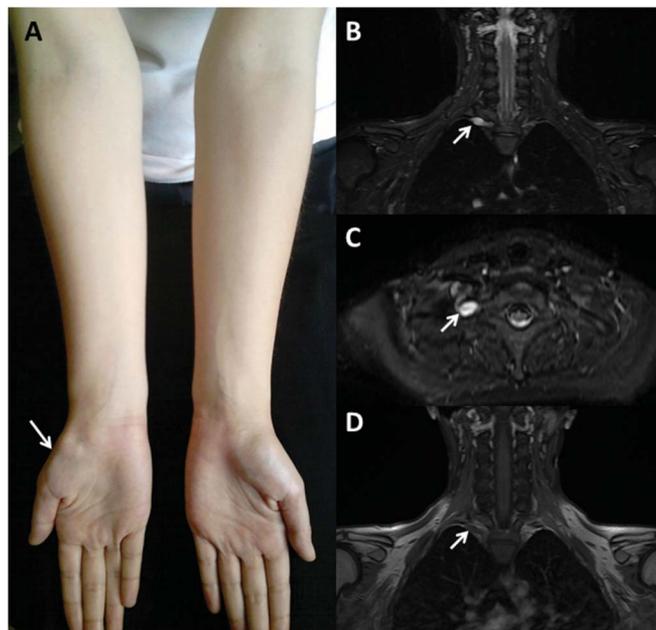


Teaching NeuroImages: Swollen T1 nerve root in neurogenic thoracic outlet syndrome

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Figure Atrophy in the right upper extremity and MRI lesion



(A) Thenar and mild forearm atrophy on the right side. MRI revealed T2 hyperintense (coronal [B] and axial [C] short T1 inversion recovery T2-weighted) and T1 iso/hypointense nonenhancing (D, fast spin-echo T1-weighted with IV gadolinium) fusiform focal expansion of the proximal extraforaminal segment of the right T1 root.

A 17-year-old girl without any history of considerable trauma or previous disease was admitted with weakness and wasting in the right forearm and hand, more marked on the thenar eminence (figure). EMG revealed unrecordable medial antebrachial cutaneous sensory and low-amplitude median motor responses (recorded from thenar muscles) along with chronic neurogenic changes in the hand muscles. MRI showed a fusiform focal expansion of the right T1 root (figure). Neurogenic thoracic outlet syndrome (NTOS) was diagnosed and surgically decompressed.¹

The reported MRI findings in NTOS are generally compression/displacement of the lower trunk elements. Nerve root swelling proximal to the compression site, probably caused by endoneurial fluid accumulation, is a rare observation.²

AUTHOR CONTRIBUTIONS

Dr. Zeliha Matur: patient care, drafting and revising the manuscript. Dr. Fatih Dikici: patient care, revising the manuscript. Dr. Artur Salmashoğlu: examination of the patient. Dr. Serra Sencer: examination of the patient. Dr. Barış Baslo: examination of the patient. Dr. Emre Öge: patient care, reviewing the manuscript.

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DISCLOSURE

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