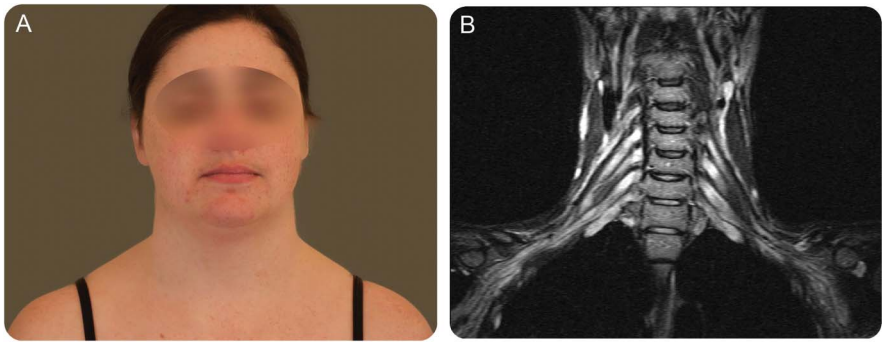
Marked enlargement of neck circumference from nerve hypertrophy in CIDP

Figure **Clinical and MRI correlation of cervical nerve hypertrophy in chronic inflammatory demyelinating polyradiculoneuropathy**



(A) Striking uniform enlargement of the neck and upper trapezius region developed insidiously over the last decade. It was not of concern to the patient. (B) MRI coronal short tau inversion recovery image shows hyperintensity and marked hypertrophy of all cervical nerves and trunks of the brachial plexus.

Painless enlargement of the neck is most often due to adiposity, goiter, or lymphadenopathy. The figure, A, demonstrates how diffuse hypertrophy of cervical spinal nerves and trunks can also produce a clinically obvious increase in neck circumference.

The patient is a 35-year-old woman with teenage-onset chronic inflammatory demyelinating polyradiculoneuropathy (CIDP), confirmed by nerve conduction studies, raised CSF protein, MRI (figure, B), and response to treatment.

Nerve hypertrophy in CIDP is often prominent in proximal elements of the peripheral nervous system. It is typically revealed by MRI[1] but not obvious clinically. In contrast, palpable enlargement of distal cutaneous branches is more common in hypertrophic forms of Charcot-Marie-Tooth disease.

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Author contributions: Pierre Bourque: acquisition of data, intellectual content. Thanh Nguyen: acquisition of radiologic data. Jocelyn Zwicker: critical revision of manuscript for intellectual content. Jodi Warman Chardon: critical revision of manuscript for intellectual content.

Acknowledgment: The authors thank Janine Klaas for clinical photography.

Study funding: No targeted funding reported.

Disclosure: The authors report no disclosures relevant to the manuscript. Go to Neurology.org for full disclosures.

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1. Adachi Y, Sato N, Okamoto T, et al. Brachial and lumbar plexuses in chronic inflammatory demyelinating polyradiculoneuropathy: MRI assessment including apparent diffusion coefficient. Neuroradiology 2011;53:3–11.

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Neurology 2016;87;442
DOI 10.1212/WNL.0000000000002901