Teaching NeuroImages:

Median nerve MRI changes over time in neuralgic amyotrophy

Manuel Corato, MD,
PhD

Pasquale De Nittis, MD

Nicoletta Trenti, MD

Sabrina Paganoni, MD,
PhD

Correspondence to
Dr. Paganoni:
spaganoni@partners.org

Figure Left upper arm MRI (postgadolinium, axial T1-short tau inversion recovery sequences)

(A) Two months after onset, MRI shows increased median nerve diameter, perineural thickening, marked gadolinium enhancement, and poor visualization of nerve fascicles due to intraneural inflammation. (B) Follow-up MRI: median nerve shows regular fascicular structure and normal gadolinium enhancement in the perineurium. Contrast is present in the brachial artery in (B) but not in (A) due to different postcontrast timing.

A 40-year-old woman presented with 2 weeks of left arm pain followed by hand weakness and numbness. Electrodiagnostic testing revealed an isolated median sensorimotor axonopathy localizing proximal to the pronator teres. The working diagnosis of a *forme fruste* of neuralgic amyotrophy was made. MRI of the left arm was performed to exclude rare structural causes of proximal median neuropathy. The median nerve showed inflammatory features with a diffusely increased signal on short tau inversion recovery sequences that enhanced with gadolinium (figure, A). Two years after onset, symptoms had resolved. Repeat MRI showed resolution of the abnormal findings (figure, B).

AUTHOR CONTRIBUTIONS

Manuel Corato: study concept/design, analysis/interpretation of data, drafting/revising the manuscript. Pasquale De Nittis, Nicoletta Trenti: analysis/interpretation of data and imaging, drafting/revising the manuscript. Sabrina Paganoni: study concept/design, analysis/interpretation of data, drafting/revising the manuscript.

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DISCLOSURE

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Manuel Corato, Pasquale De Nittis, Nicoletta Trenti, et al.

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