

Teaching Video NeuroImage: Myokymia on Muscle Ultrasound in Radiation-Induced Brachial Plexopathy

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A 65-year-old woman presented with right arm weakness and paresthesia. She had undergone radiotherapy for a supraclavicular metastasized lung cancer 8 years ago. Examination revealed weakness, wasting, and wavelike involuntary contractions in the right deltoid, triceps, and dorsal interossei muscles. EMG confirmed a brachial plexopathy with additional myokymic discharges. Spontaneous semirhythmic contractions with a rotatory or to-and-fro component were seen on muscle ultrasound, compatible with myokymia (Video 1).

Myokymic discharges indicate radiation-induced plexopathy rather than tumor recurrence or other plexopathy forms, probably because myokymia arises from radiation-induced membrane instability and ectopic neural activity. Muscle ultrasound is a promising noninvasive tool for its detection, complementary to EMG.^{1,2}

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Disclosure

The authors report no disclosures relevant to the manuscript. Go to [Neurology.org/N](https://www.neurology.org/N) for full disclosures.

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Michaël T.J. Peeters, MD	Department of Neurology, Maastricht University Medical Center, the Netherlands	Drafting/revision of the manuscript for content, including medical writing for content, major role in the acquisition of data, and analysis or interpretation of data
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