

# Neurology<sup>®</sup>

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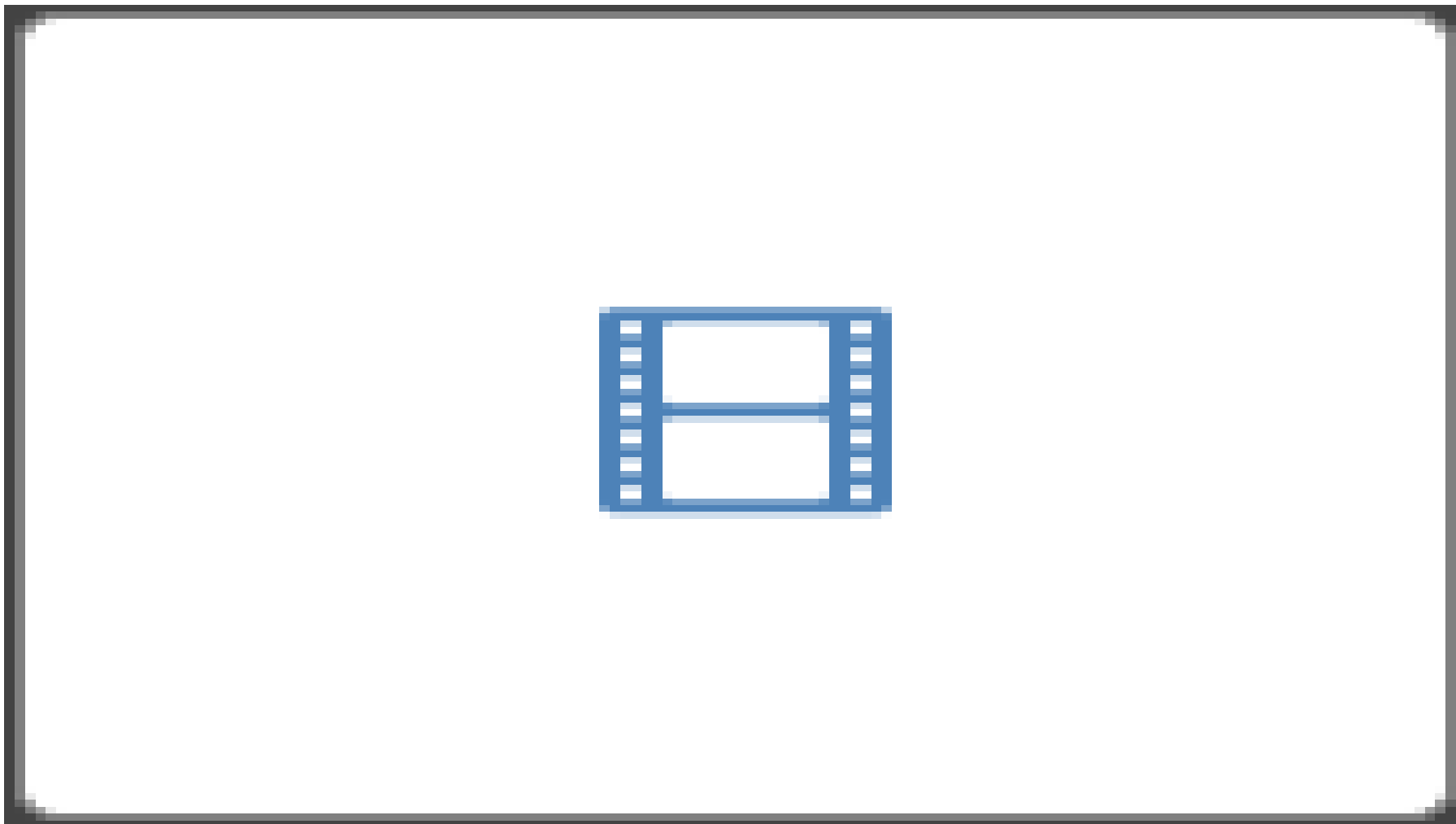
## **Resident & Fellow Section Teaching Neurolmage (or Teaching Video Neurolmage)**

A 65-year-old women with quivering muscles

# Vignette

- A 65-year-old woman presented with a 2 year history of slowly progressive painless weakness, paresthesia and quivering muscles of the right arm.
- In the past medical history she was treated with radiotherapy for a supraclavicular metastasized non-small-cell lung carcinoma (radiation dose 66 Gray)
- Examination revealed subtle wasting and weakness of the deltoid, triceps and dorsal interossei muscles of the right arm. Involuntary wave-like, 'quivering' movements were seen in the right deltoid, triceps and dorsal interossei muscles. Biceps and brachioradial deep tendon reflexes were diminished on the right side. Further neurological examination was undisturbed.

# Imaging



# Myokymia on Muscle Ultrasound in Radiation-Induced Brachial Plexopathy

- The clinical scenario of non-dermatomal painless weakness, diminished reflexes and paresthesia of the right arm combined with the EMG findings (polyphasic motor unit potentials in C5-8 muscles of right arm) are compatible with brachial plexopathy.
- Demonstrating myokymia is highly suggestive for radiation-induced plexopathy and distinguishes it from other causes of plexopathy, including neoplastic plexopathy.
- Muscle ultrasound is a promising, non-invasive diagnostic tool for its detection, complementary to EMG