Video NeuroImages: Paraneoplastic spinal myoclonus associated with Caspr2 antibodies

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Figure EMG tracing from the T9 level of the right rectus abdominus

EMG demonstrates an unusual decrescendo firing pattern which, to our knowledge, has not been previously described. Myoclonic bursts varied between 600 milliseconds and 1.8 seconds in duration.

A 42-year-old man with thymoma-associated myasthenia gravis presented with 6 weeks of abnormal leg movements. Examination revealed myoclonus in the legs bilaterally (video, links.lww.com/WNL/A322). Chest CT showed recurrence of metastatic thymoma. MRI spine revealed nonspecific hemosiderin deposition at the T9 level without metastases or vascular malformation. EMG demonstrated right leg and rectus abdominus myoclonus up to T6, most prominently at T9-L1 (figure). Serum anti-contactin-associated protein-like 2 (Caspr2) antibodies were positive. Chemotherapy led to resolution of the myoclonus. Caspr2 antibodies have been associated with limbic encephalitis and neuromyotonia,^{1,2} but our patient showed unusual Caspr2-associated spinal myoclonus.

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Author contributions

Harrison Hines: clinical patient care, acquisition of video data, drafting/revising the manuscript, accepts responsibility for conduct of research and final approval. Nick M. Murray and Sarah Ahmad: clinical patient care, critical revision of the manuscript. Safwan Jaradeh: clinical patient care, analysis of EMG studies. Carl A. Gold: clinical patient care, study supervision, critical revision of the manuscript.

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Disclosure

The authors report no disclosures relevant to the manuscript. Go to Neurology.org/N for full disclosures.

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