

# Opsoclonus associated with scrub typhus



A 64-year-old woman and a 40-year-old man (video on the *Neurology*<sup>®</sup> Web site at [www.neurology.org](http://www.neurology.org)) diagnosed with scrub typhus presented opsoclonus. Drowsiness and mild nuchal rigidity were observed, whereas cranial nerve dysfunction, limb weakness, and sensory loss were not. Brain MRI showed normal findings. The serum antibody titers to *Orientia tsutsugamushi* were 1:2,560. CSF cytology revealed white blood cell counts of 49 and 28/mm<sup>3</sup> and protein levels of 102 and 91 mg/dL.

Opsoclonus reflects an abnormality of the tonic inhibitory control of horizontal and vertical saccadic burst neurons exerted by “pause cells” in the parapontine reticular formation.<sup>1</sup> It complicates various medical diseases, including viral infections, toxin, encephalitis, brain tumors, and paraneoplastic syndromes.<sup>2</sup>

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## REFERENCES

1. Anderson NE, Budde-Steffen C, Rosenblum MK, et al. Opsoclonus, myoclonus, ataxia, and encephalopathy in adults with cancer: a distinct paraneoplastic syndrome. *Medicine (Baltimore)* 1988;67:100–109.
2. Hersh B, Dalmau J, Dangond F, Gultekin S, Geller E, Wen PY. Paraneoplastic opsoclonus-myoclonus associated with anti-Hu antibody. *Neurology* 1994;44:1754–1755.

Supplemental data at  
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