Figure. (A) Hand-held vibrating equipment used by the patient in clearing rust and paint from a metal fence. (B) Left (symptomatic) and right (asymptomatic) median nerve motor conduction studies show left conduction block between palm and wrist with normal distal motor amplitude.

Vibration-induced median neuropathy

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A 42-year-old man used an electrical sander without protective gloves for 8 hours while cleaning rust from a fence (figure, A). Subsequently, he noted left thumb abduction weakness with normal sensation. Six days later, electrodiagnostic studies revealed significant median motor conduction block between palm and

wrist (figure, B, top), and decreased recruitment in the abductor pollicis brevis. Median sensory studies had normal results. The weakness resolved in 4 weeks.

Acute median nerve compression may follow recreational or occupational activities.¹ Selective acute demyelination of the recurrent thenar motor branch of the median nerve may be confirmed by stimulation in the palm.^{1,2}

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1. Hsu W, Chen W, Oware A, Chiu H. Unusual entrapment neuropathy in a golf player. *Neurology* 2002;59:646.
2. Lesser EA, Venkatesh S, Preston DC, Logigian EL. Stimulation distal to the lesion in patients with carpal tunnel syndrome. *Muscle Nerve* 1995; 18:503-507.

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