Neuro *Images*

A ripping roller coaster ride

David J. Blacker, MD; and Eelco F.M. Wijdicks, MD

A 41-year-old woman presented with a right frontotemporal headache and drooping of the right eye. The previous day she rode a violent roller coaster ride twice (figure, left panel) and recalled vigorous jerking of her neck. Examination revealed a right Horner syndrome (figure, middle panel) with ptosis, meiosis, and no anhidrosis. Magnetic resonance angiography (figure, right panel) confirmed the diagnosis of right internal carotid artery dissection.

Several other cases of carotid dissection have been reported related to amusement park equipment.1 Roller coaster rides can generate force in excess of 4 "Gs," which in combination with neck movements could potentially rip the carotid intima. Distension of the injured arterial wall compresses the adjacent sympathetic fibers,2 resulting in a Horner syndrome, which is typically without anhidrosis, in lesions above the bifurcation, where the fibers supplying the face leave to traverse with the external carotid artery.

From the Department of Neurology, Mayo Clinic, Rochester, MN. Received May 27, 2003. Accepted in final form July 18, 2003. Address correspondence and reprint requests to Dr. Eelco F.M. Wijdicks, Mayo Clinic, 200 First Street SW, W8B, Rochester, MN 55905; e-mail: Wijde@mayo.edu







Figure. (A) The patient on the roller coaster ride. (B) Right Horner syndrome. (C) Magnetic resonance angiography confirmed the diagnosis of right internal carotid artery dissection.

^{1.} Braksiek R, Roberts D. Amusement park injuries and deaths. Ann Emerg Med 2002;39:65-72.

^{2.} Mokri B, Sundt T, Houser W, Piepgras D. Spontaneous dissection of the cervical internal carotid artery. Ann Neurol 1986;19:126-138.



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