A 36-year-old man was stabbed in the neck. His left occipital artery was repaired. Ten years later, he noticed a left ear bruit and experienced intermittent paresthesias in the left trigeminal and C5 distributions and bilaterally below the knees. He had a 3-day episode of generalized incoordination. Examination revealed a pulsatile mass and loud bruit below the left occiput with mild weakness and decreased reflexes in the left arm.

MRI (figure 1) and angiography (figure 2) revealed brainstem and cervical cord hyperintensity due to a high-flow vertebrovertebral arteriovenous fistula. His symptoms and MRI changes probably reflected venous hypertension: 6 weeks after endovascular occlusion they had resolved, and there was no fistula recurrence on repeat angiography.

REFERENCES
The fistula draining veins (A, B, white arrowheads) drew all flow from the left vertebral artery (LVA) (A). Most of the right vertebral artery flow (RVA) (B) and significant bilateral carotid flow (not shown) also drained to the fistula via retrograde flow in the distal LVA. There was resolution after endovascular occlusion (Coil) (C, D).
Teaching NeuroImages: Traumatic vertebral arteriovenous fistula
Brendon P. Boot, Jason H.M. Macdonald, Geoffrey D. Parker, et al.

Neurology 2011;76:e29-e30
DOI 10.1212/WNL.0b013e31820c2eaa

This information is current as of February 14, 2011

Updated Information & Services
including high resolution figures, can be found at:
http://n.neurology.org/content/76/7/e29.full

References
This article cites 2 articles, 1 of which you can access for free at:
http://n.neurology.org/content/76/7/e29.full#ref-list-1

Subspecialty Collections
This article, along with others on similar topics, appears in the following collection(s):
All Trauma
http://n.neurology.org/cgi/collection/all_truma
Arteriovenous malformation
http://n.neurology.org/cgi/collection/arteriovenous_malformation
MRI
http://n.neurology.org/cgi/collection/mri
Other cerebrovascular disease/Stroke
http://n.neurology.org/cgi/collection/other_cerebrovascular_disease___stroke

Permissions & Licensing
Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:
http://www.neurology.org/about/about_the_journal#permissions

Reprints
Information about ordering reprints can be found online:
http://n.neurology.org/subscribers/advertise