

Trigeminal neuralgia: the first sign of arteriovenous malformation

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A 45-year-old female was admitted to the hospital with acute onset right sided hemiparesis and left sided abducens palsy. She had a two-year history of paroxysmal shock like pain in the distribution of the second and third divisions of her left trigeminal nerve. The pain was triggered by eating and brushing teeth. She was pain-free with carbamazepine (CBZ) treatment. Computed tomography of the brain demonstrated left pontocerebellar hemorrhage (Fig. 1). Digital subtraction angiography showed an arteriovenous malformation (AVM) lo-

cated in the cerebellopontine angle fed by the left superior cerebellar and anterior inferior cerebellar arteries and draining into the transverse sinus (Fig. 2). Magnetic resonance imaging of the brain also demonstrated vascular loops of the AVM at the root of trigeminal nerve (Fig. 3). The patient was referred to endovascular treatment. Endovascular embolization was performed with Onyx and the patient underwent gamma knife radiosurgery for the residual AVM nidus. CBZ treatment was discontinued and the patient remained free from pain.

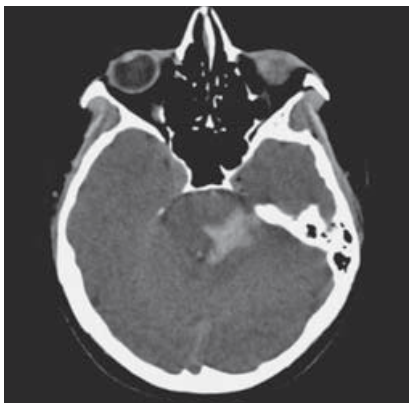


Figure 1.

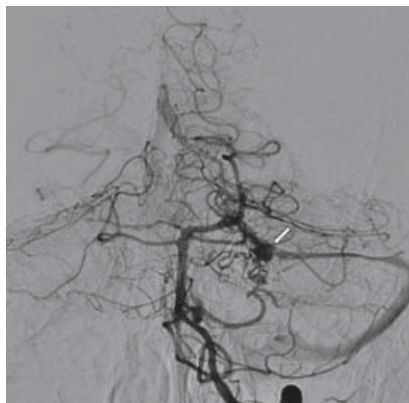


Figure 2.

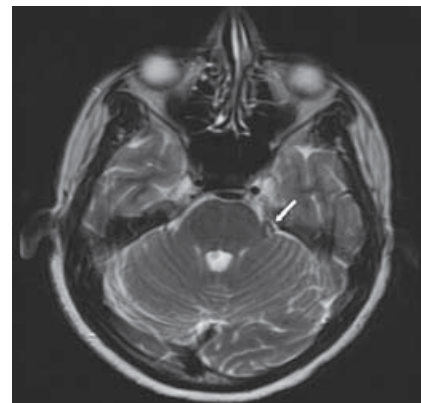


Figure 3.

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Trigeminal neuralgia caused by compression of an AVM is rare (1). Treatment of AVM is important both for preventing hemorrhage and amelioration of trigeminal neuralgia.

geminal neuralgia and treated with endovascular coiling. *Neurol India* 2005;53:247-8.

REFERENCE

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