

A Rare Cause of Trigeminal Neuralgia: Cerebellopontine Angle Meningioma

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Dear editor,

Trigeminal neuralgia (TN) is a neuropathic pain described as intense and electric shock-like pain episodes in the trigeminal nerve territory. Most of the time, trigeminal neuralgia is called as idiopathic TN since the cause is not known. Sometimes, space occupying lesions such as meningiomas, trigeminal neuromas and aneurysms may trigger TN. Cerebellopontine angle's tumors are 6-10% of all intracranial tumors (1). Epidermoid cyst is the most common cause of TN and meningiomas and neurinomas can also cause TN (2). These tumors can cause trigeminal neuralgia in 3 ways; a- The tumor presses on the nerve directly, b- The tumor compresses the nerve root by pushing arterial vessels, c- Compression of tumor to pons can cause irritation of the trigeminal nerve nuclei (2). The tumors which are causing TN have different Magnetic resonance imaging (MRI) characteristics. For instance, epidermoids usually do not compression to adjacent structures, no enhancement and bright on DWI. Schwannomas expand the nerve and extend into the internal auditory canal. Meningiomas have dural tail, generally strong and homogeneous contrast enhancement (3).

57 years-old female patient was admitted suffering from tingling and recurrent pain episodes. MRI showed space occupying extra-axial lesion that isointense with gray matter on T1 WI, slightly hyperintense on T2 WI, compressing pons and cerebellum, dural-based, homogeneously enhancing, 18x17x19 mm in size, on cerebellopontine angle. Meningioma was diagnosed according to classical appearance properties.

Consequently, contrast-enhanced brain MRI should be taken in presence of trigeminal neuralgia. If there is space occupying lesion, characterization of the mass can be done and clearly evaluated the relationship between the trigeminal nerve and mass. In our case, MRI used efficiently for diagnosis and was helpful in planning treatment options.

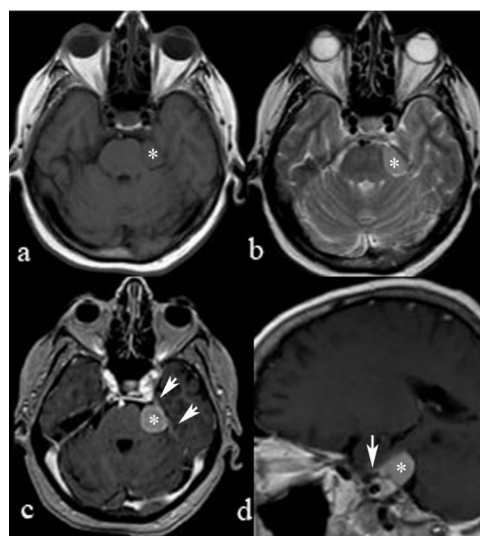


Figure 1. Axial T1 WI(a), T2 WI(b), CE-T1 WI(c), Sagittal CE-T1 WI(d) sequences show well-circumscribed lesion (*) with dural thickening and compressing pons and cerebellum.

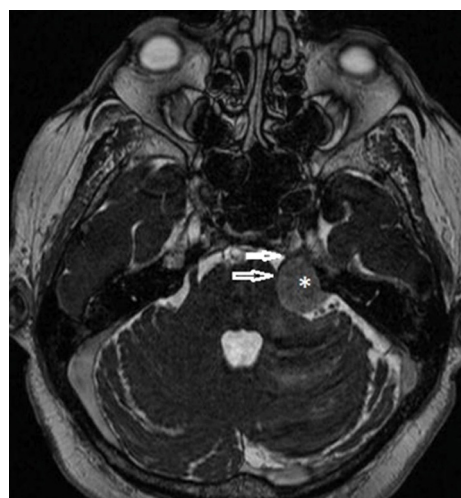


Figure 2. 3D BASG RADAR sequence shows extradurally located on the left, compressing and thinning of the trigeminal nerve on anterior (arrows), well-circumscribed lesion (*).



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