CERVICAL MENINGIOMA PRESENTING AS CEREBELLAR INFARCTION

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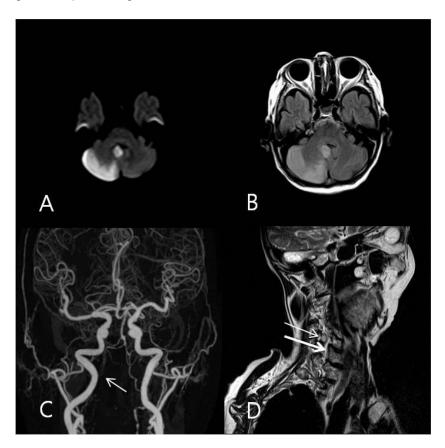
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Introduction: Meningioma is the most common extra-axial brain tumor in adults.

Tumors situated in these locations often involve an intracranial portion of the internal carotid artery (ICA) and may compromise cerebral blood flow. To our knowledge, there are no documented cases of a meningioma causing stroke by vertebral artery occlusion. We report a case of meningioma presenting with cerebellar infarction as a result of vertebral artery compression.

Case report: A 89-year-old right handed woman was referred for evaluation of dizziness and imbalance for 1 days. Brain magnetic resonance imaging (MRI) revealed a right posterior inferior cerebellar artery territory infarction (Fig.1.A,B.). CT angiography demonstrated obstruction of right vertebral artery compressed by vertebral mass lesion (Fig.1.C.).

Cervical MRI showed 2cm sized ovoid mass with enhancement in right neural foramen of the C4-5 level compressing a right vertebral artery (Fig.1.D.). Electrocardiogram and transesophageal echocardiography was no evidence of embolic source. The patient was given antiplatelet agent.



Discussion: We hypothesize that meningiomas typically do not compromise a vertebral artery significantly because of the slow growth rate and non-invasive nature of the tumor, as well as the high arterial pressures of the vertebral artery.

Consequently, cerebrovascular insufficiency is an exceedingly uncommon presentation for meningioma. Vascular sclerotic change by newly developed hypertension and aging may also contribute to vessel compression of meningioma.

As a conclusion, although extremely rare, direct vascular compression of the meninigioma should also be considered in the differential diagnosis of cerebellar infarction.