A RARE CASE OF BASILAR TIP ANEURYSM

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ABSTRACT

Though basilar tip aneurysms are not common, they are the most common aneurysm of the vertebrobasilar system and can be devastating if they rupture. The resulting subarachnoid hemorrhage can cause a variety of signs and symptoms. They are diagnosed using CT angiogram or MR angiogram. Like other intracranial aneurysms, basilar tip aneurysms may be clipped or coiled.

Key words: Vertebrobasilar, Aneurysm, Subarachnoid haemorrhage

Introduction

Basilar tip aneurysms occur at the point where basilar artery divides into two posterior cerebral arteries. It accounts for 5-8% of intracranial aneurysms. Though basilar tip aneurysms are not common, they are the most common aneurysm of the vertebrobasilar system. The surgical treatment of basilar tip aneurysms remains one of the most difficult tasks in neurosurgery because the view is obscured due to the depth of the aneurysm, overlapping neurovascular and bony structures, and the proximity of perforators.

Case Presentation

A 39 years old male patient presented with non-specific persistent headache under evaluation. Clinical examination was unremarkable.

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Discussion

Patients at risk for developing cerebral aneurysms include those with atherosclerosis, those with a family history of intracranial aneurysms, those with a history of hypertension or collagen vascular disease, and those with polycystic kidney disease. Smokers are also at a higher risk of developing aneurysms. Basilar tip aneurysms form when the lining of the vessel wall is thinned. Typically the muscular layer of the wall - the tunica media - is weakened as a result of the aforementioned reasons. This thinning allows turbulent blood flow to form out pouchings in the vessel wall. Basilar artery aneurysms are uncommon, but can be devastating if they rupture. The most common symptoms of a basilar tip aneurysm occur after it ruptures. The resulting subarachnoid hemorrhage can cause a variety of signs and symptoms. The most common being a severe headache, although cranial nerve dysfunction, stroke, coma, and death can also occur. Basilar artery bifurcation aneurysms constitute a major surgical challenge, due mainly to their depth within an extremely narrow surgical field, their intimate relationship with thalamoperforating arteries, and the difficulty gaining sufficient exposure of the basilar artery. Like other intracranial aneurysms, basilar tip aneurysms may be clipped or coiled. Clipping of an aneurysm involves an open surgical procedure where the surgeon dissects down to the aneurysm and places a clip across its neck. This effectively excludes it from the circulation and prevents it from rupturing.

Conclusion

Basilar artery aneurysms are uncommon, but can be devastating if they rupture. So earlier detection for management with clipping and/or coiling is of immense importance.
References


