SPONTANEOUS EXTRACRANIAL VERTEBRAL ARTERY DISSECTION TREATED WITH COIL EMBOLIZATION: A CASE REPORT

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Introduction: Spontaneous vertebral artery (VA) dissection is a rare condition which may present as posterior circulation ischemic symptoms. Recently, advanced neuroimaging techniques can make exact diagnosis and successful endovascular treatment.
Case report: We report a 50-year-old man who developed vertigo, dysarthria following headache. Magnetic resonance imaging (MRI) revealed an infarction in the left posterior inferior cerebellar artery (PICA) territory. Cerebral angiography showed irregular narrowing with tapering from left V2 to V3 segment and luminal irregularity of basilar artery. These findings suggested that dissection in the left V2 caused artery-to-artery embolism in the left PICA. Despite administration of anti-thrombotic agents, he recurrently suffered from embolic stroke. Serial diffusion weighted imager showed new hyperacute infarction in left pons, bilateral cerebellums and thalamus. Coil-embolization of the left VA by endovascular therapy was performed, and thereafter the dissecting lesion of the left VA was completely occluded and his symptoms improved.
Discussion: Long-term outcome to patients with extracranial vertebral dissection appears to be favorable. However, some dissection can progress, and failure of anticoagulation, can occur. In selected cases of vertebral artery dissections, the use of endovascular therapy was considered to permit reconstruction of the vertebral artery.