

Aneurysm of the Distal Posterior Inferior Cerebellar Artery Originating from Extracranial Fenestrated Vertebral Artery

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To the Editor: We present a rare case of ruptured aneurysm of the distal posterior inferior cerebellar artery (PICA) originating from the extracranial fenestrated vertebral artery. The patient, a 64-year-old woman, suffered severe headache, and a computed tomographic scan demonstrated subarachnoid hemorrhage with ventriculomegaly. Left vertebral angiograms revealed an aneurysm at the distal part of the PICA branching from the extracranial fenestrated vertebral artery (Figure 1). Right vertebral angiograms demonstrated no vascular abnormalities. The aneurysm was obliterated successfully through the midline suboccipital approach.

Distal PICA aneurysm is rare, accounting for only 1.7% of intracranial aneurysms.¹ In addition, the present distal PICA aneurysm was associated with double vascular anomalies (extracranial origin of the PICA and vertebral artery fenestration). Although PICA has a highly variable origin, PICA of extracranial origin is unusual.^{2,3} Such variation of the PICA origin has attracted attention for surgical technical reasons.^{2,3} The extracranial fenestration of the vertebral artery seems to be caused by anomalous anastomosis during embryological development.⁴ To our knowledge, this is the first report of ruptured aneurysm of the distal PICA originating from the extracranial fenestrated vertebral artery.

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Figure Legend

Figure 1: Left vertebral angiograms, showing an aneurysm at the distal posterior inferior cerebellar artery (black arrowhead) originating from the extracranial (white arrowhead), fenestrated (arrows) vertebral artery.