Predominant Intraventricular Hemorrhage From a Ruptured Posterior Communicating Artery Aneurysm

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Keywords

cerebral aneurysm, intraventricular hemorrhage

Figure 1. Laterally oriented, ruptured posterior communicating artery aneurysm causing intraventricular hemorrhage. A and B, Intraventricular hemorrhage, predominantly in the left lateral ventricle without significant subarachnoid hemorrhage. C, A computed tomography (CT) angiography revealing a laterally oriented posterior communicating artery aneurysm (arrow) as the etiology of the intraventricular hemorrhage. D, Corresponding digital subtraction cerebral angiography demonstrating the laterally oriented left posterior communicating artery aneurysm.

Case

A 45-year-old woman presented with acute onset of headache and confusion. A computed tomography (CT) of the brain showed predominant intraventricular hemorrhage (IVH) without significant subarachnoid hemorrhage (Figure 1A and B). A CT angiography showed a laterally oriented, left posterior communicating artery (PCOM) aneurysm (Figure 1C). This aneurysm, confirmed by cerebral angiography (Figure 1D), was successfully coil embolized. The ventriculostomy was placed in the right lateral ventricle to treat the obstructive hydrocephalus. The patient survived without major neurological deficits.

Although ruptured cerebral aneurysms rarely present as isolated IVH, laterally oriented PCOM aneurysms can rupture through the medial temporal lobe, causing predominant IVH without subarachnoid hemorrhage.¹ This case highlights the importance of urgent vascular imaging for optimal IVH evaluation and management.²

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