Microsurgical confirmation of perforating arteries arising from the fundus of a posterior communicating artery aneurysm

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Perforating arteries rarely project from the fundus of an aneurysm. We present the case of a 35-year-old woman who was found to have a right posterior communicating artery (PCOM) aneurysm via catheter angiography. Superselective microcatheter angiography revealed that perforating arteries arose from the aneurysm fundus that supplied the anterolateral thalamus. Microsurgical exploration confirmed several small perforating arteries arising from the aneurysm dome as well as an atretic distal PCOM artery. Given the complex anatomy, the lesion was unsuitable for clipping. We propose that this aneurysm represents a developmental variant whereby the proximal PCOM artery becomes atretic and terminates in PCOM perforators.

The video can be found here: http://youtu.be/iDcp9fsDj4.

KEYWORDS posterior communicating artery; intracerebral aneurysm; infundibulum; perforating arteries; video