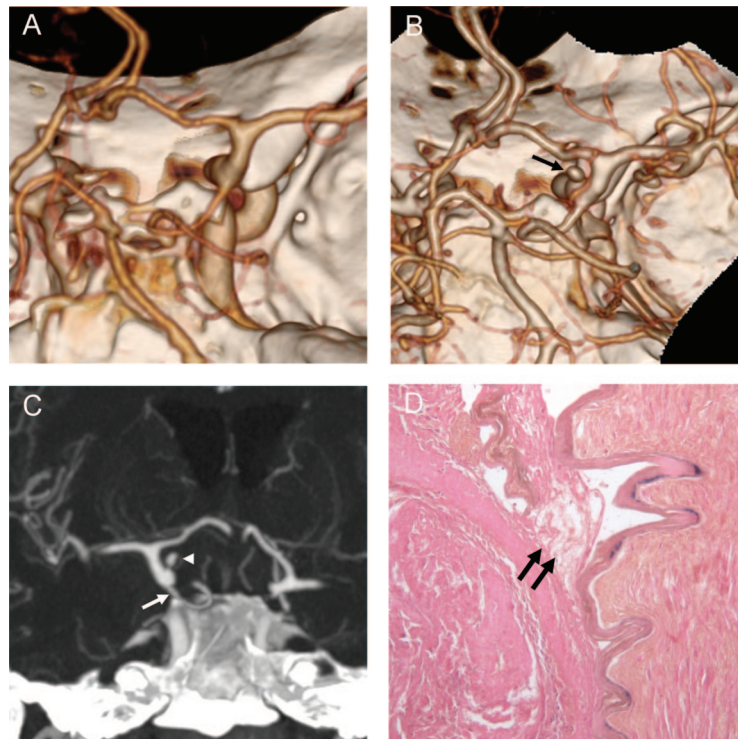


# Teaching NeuroImages: Dual-phase 3D multislice CT angiography for the detection of intracranial pseudoaneurysm

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**Figure** Dual-phase 3-dimensional multislice CT angiography and pathology of an intracranial pseudoaneurysm



(A) An early-arterial-phase 3-dimensional CT angiogram shows no aneurysm on the right internal carotid artery. (B, C) A dorsal wall aneurysm in the right ICA on a late-arterial-phase 3-dimensional CT angiogram (B, black arrow) and on a coronal maximal intensity projection image (C: arrowhead, pseudoaneurysm; white arrow, fetal-type posterior cerebral artery). (D) Aneurysm wall pathology shows rupture of the internal elastic lamina (double black arrows) (D: elastic stain,  $\times 200$ ).

A 45-year-old woman was diagnosed with a subarachnoid hemorrhage. Dual-phase 3-dimensional CT angiography (12 and 23 seconds) showed no aneurysm in the early arterial phase (figure, A), but revealed a dorsal-wall aneurysm in the right internal carotid artery on a 3-dimensional image (figure, B) and a maximal intensity projection image (figure, C) in late arterial phase. This aneurysm was trapped with a bypass surgery, and pathologically confirmed as a pseudoaneurysm (figure, D). Dual-phase multislice CT is a valuable tool to confirm an

ongoing bleeding site,<sup>1,2</sup> which may be a critical clue for the treatment strategy of an intracranial pseudoaneurysm.

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