Teaching Video NeuroImages: High blood flow velocity in the parent artery prior to basilar tip aneurysm rupture

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A 70-year-old asymptomatic man presented with moyamoya disease (MMD)–associated basilar tip aneurysm (BTA) noted on digital subtraction angiography (figure 1, A–D). 4D-flow MRI revealed a concentrated inflow jet with high velocity compared with previous studies1 (video 1 and figure 2, A–F). Considering the high risk of endovascular treatment, the patient chose conservative treatment. After 1 month, the aneurysm ruptured (figure 1, E–F).

The compensatory reaction due to internal carotid artery occlusion (figure 1D) could induce increased flow, leading to BTA formation and rupture. 4D-flow MRI can provide...
comprehensive hemodynamics with accurate blood flow and velocity. MMD-derived concentrated inflow jet with high velocity can expedite aneurysm rupture, which mandates prompt operation.

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Disclosure
The authors report no disclosures relevant to the manuscript. Go to Neurology.org/N for full disclosures.

References
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