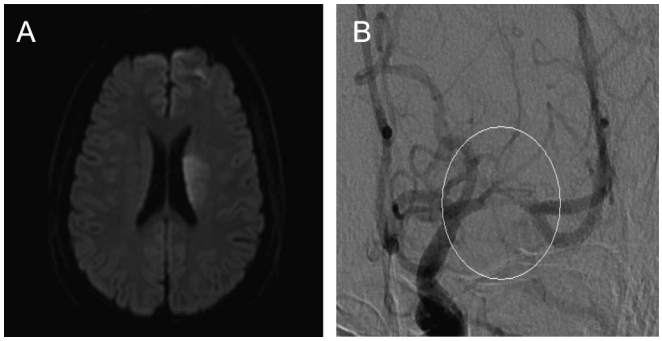
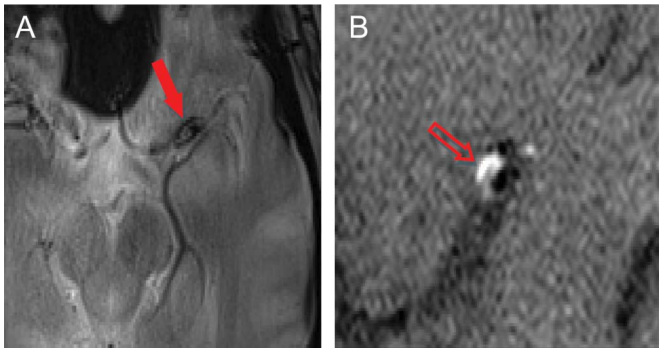
Shadow sign in a T2* brain image in spontaneous middle cerebral artery dissection

Figure 1 Left striatocapsular infarction with relevant middle cerebral artery stenosis



High signal intensity on diffusion-weighted image (A) and stenosis of the left M1 trunk (B).

Figure 2 Shadow sign from intramural hematoma



Low signal intensity (A, arrow) around the left M1 trunk on T2* image ("shadow sign") and high signal rim (B, hollow arrow) of the mid portion of the left middle cerebral artery on sagittal high-resolution T1-weighted image.

A 29-year-old man presented with unilateral dull headache for 3 days, similar to previous headache, but with right hemiparesis; there was no antecedent infection or trauma. MRI showed left striatocapsular infarction (figure 1A), without evidence of cardioembolism or vasculitis. Digital subtraction angiography demonstrated stenosis of the left middle cerebral artery (MCA) trunk (figure 1B). Intramural hematoma suggests arterial dissection.[1] The bulging intramural hematoma seen on T2* corresponded with an eccentric high signal rim on sagittal T1-weighted imaging, along the anterosuperior MCA wall at the arterial perforator origin (figure 2). The diagnosis was spontaneous MCA dissection.

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