Severe MCA stroke without MCA occlusion?

Thrombectomy uncovers accessory middle cerebral artery

(A) Conventional angiography demonstrates the thrombus (*) at the right internal carotid artery bifurcation occluding the anterior cerebral artery but right middle cerebral artery was well-perfused. (B) After thrombectomy, an accessory middle cerebral artery (white arrow) originating from the right A1 segment (black arrow) was uncovered.
A 21-year-old woman presented with dysarthria and severe left-sided hemiparesis. CT angiography detected a thrombus at the right distal internal carotid artery, but a well-perfused middle cerebral artery (MCA). The mechanism of the clinical presentation was therefore uncertain. IV thrombolysis was performed but she did not improve. Subsequent thrombectomy uncovered an accessory MCA originating from the A1 segment (figure 1). Neurologic deficits improved promptly and MRI demonstrated a lenticulostriate infarction (figure 2). Accessory MCA is an anatomical variant occurring in 0.4%. This case illustrates that knowledge of rare variants may become important especially in the emerging era of mechanical thrombectomy.

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