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# Moyamoya disease

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## Background:

Moyamoya disease (MMD) is a chronic, occlusive cerebrovascular disease characterized by progressive stenosis at the terminal portion of the internal carotid artery and an abnormal vascular network at the base of the brain. The clinical presentation is variable. Children mainly present with ischemia-related neurologic episodes whereas MMD in adults can manifest as either an ischemic event or an intracranial hemorrhage (ICH).

### Case presentation:

We present a 35-year-old man presented with recurrent paresthesias of the left side of the face, left hand, left foot and dysarthria in the emergency department. Initial CT angiography verified stenoocclusive changes in cerebral blood vessels typical of Moyamoya syndrome. Further processing on the performed MR excluded the existence of acute ischemia with multiple chronic changes. Cerebral panangiography confirmed changes in cerebral vessels that morphologically correspond to MMD. The patient underwent direct revascularization, creating an anastomosis between the superficial temporal artery and the middle cerebral artery (STA-MCA) without any complications. Following surgery, he was prescribed 100 mg aspirin and discharged home with a follow-up visit 6 months later.

## **Conclusion:**

MMD has become a more established cause of stroke for children and adults. To obtain the best result in patients, it is crucial to identify the disease at an early stage. In adult patients with Moyamoya disease, careful neurologic and radiologic long-term follow-up is vital to avoid further stroke and improve performance.

#### Keywords:

Moyamoya, Ischemia, Revascularization