

UNILATERAL INTRACRANIAL ARTERIOPATHY IN YOUNG ADULTS: AN ETIOLOGIC AND THERAPEUTIC CHALLENGE

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Introduction: Arterial ischemic stroke (AIS) in young adults is uncommon. Intracranial stenosis is a possible cause of AIS and has several etiologies such as non-atherosclerotic vasculopathies and premature atherosclerosis. There is little evidence regarding AIS treatment in young adults, particularly concerning arteriopathies.

Case Presentation: A 39-year-old woman, with past history of idiopathic cerebral palsy and auriculoventricular block, was admitted after onset of right facial palsy and right upper limb motor and sensory deficits associated with neck pain. Head CT scan suggested a left MCA deep infarct. Additional testing revealed left carotid siphon critical stenosis on conventional angiography without specific etiologic features. The patient was discharged with aspirin 250mg/daily. She maintained clinical fluctuation during outpatient period. SPECT scan revealed left hemisphere hypoperfusion that improved after adenosine administration. Seven months later the patient maintains clinical fluctuation with mild improvement, despite having significant better cortical perfusion on the re-evaluation SPECT scan, without additional therapy. Are we facing a pre-existing blood vessel abnormality associated with a *de novo* static vasculopathy (dissection) or is it a progressive arteriopathy (atherosclerotic, Moyamoya disease)?

Conclusion: What should be done towards critical intracranial stenosis without an established etiology, cerebral hypoperfusion and clinical fluctuation? We must repeat intracranial vascular imaging in order to differentiate nonprogressive from progressive arteriopathies and try to establish a definitive cause. Since the later have a higher risk of stroke recurrence should we optimize medical treatment by improving hypoperfusion or avoiding stenosis progression? Could endovascular treatment and surgery play a role in selected cases?