

Iodine-123 IMP SPECT before and after bypass surgery in a patient with occlusion of left anterior and middle cerebral arteries with basal abnormal telangiectasis (unilateral Moyamoya disease)

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A case of left anterior and middle cerebral arterial occlusion with angiographic features similar to Moyamoya disease was reported. IMP SPECT of the patient revealed the success of bypass surgery clearly. The patient complained of transient right hemiparesis with aphasia 4 times. The cerebral arteriography disclosed occlusions of left anterior and middle cerebral arteries at their proximal portions. Right internal carotid and its branches were normal. I-123 IMP SPECT study showed hypoperfusion in left temporal lobe, basal ganglia with incomplete reperfusion on the delayed (4 hours after injection) SPECT images. After the superficial temporal-middle cerebral artery anastomosis, I-123 IMP SPECT showed improvement of the brain blood flow. I-123 IMP SPECT was very useful in detecting the ischemic areas and evaluating the revascularizing surgery in this case.

Key words: Moyamoya disease, Transient ischemic attack, Reversible ischemic neurological deficit, I-123 IMP SPECT