

Prediction of improvement of cerebral perfusion with I-123 iomazenil SPECT

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We report a case of 61-year old man who was suffering from cerebrovascular disease with right hemiparesis and received I-123 iomazenil (IMZ) SPECT prior to carotid endarterectomy. Severe stenosis of the right internal carotid artery and occlusion of the left middle cerebral artery (MCA) were revealed by cerebral angiography, and a hypoperfused area in left MCA territory and crossed cerebellar diaschisis (CCD) on I-123 IMP SPECT was demonstrated. In contrast, IMZ SPECT showed symmetric normal distribution. After the carotid endarterectomy, the hypoperfused area in left MCA territory on IMP SPECT and hemiparesis had improved. It is thought that IMZ SPECT can be a useful tool for the prediction of improvement of cerebral perfusion and the clinical outcome.

Key words: I-123 iomazenil, cerebrovascular disease, SPECT