Mild stroke with a proximal occlusion—too good to treat?

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Introduction: Mechanical thrombectomy is a recognized effective treatment of acute intracranial proximal occlusions. However, as NIHSS cut-off is a debatable issue, when should we consider an acute stroke severe enough to treat? Our aim is to discuss this issue with an illustrative case.

Clinical Case: 58 year-old female, previous mRankin 0, smoker with an history of ductal breast carcinoma submitted to chemotherapy, is admitted mid-afternoon due to a inferior facial paralysis and dysarthria noticed at wake-up (NIHSS 2). Brain CT revealed a spontaneous hyperdensity of proximal left M1 segment and a small caudate-capsular-lenticular acute ischemic infarct. Duplex ultrasound revealed a distal ICA occlusion. Echocardiography showed severe depression of left ventricular ejection fraction (20%). Considering the evolution time window and the mild neurologic deficits, a decision to withhold endovascular treatment was made and the patient was admitted to our stroke unit. On the third day, there was neurologic deterioration (NIHSS 14). At this time, brain CT maintained the described infarct area but had a large perfusion deficit in MCA territory, compatible with a significant perfusion mismatch. Anglo-CT confirmed ICA distal occlusion. After multidisciplinary discussion, mechanical thrombectomy was performed, 53 hours after symptom onset, successfully (TICI 3). The patient was discharged with anticoagulation (heart failure), with NIHSS 2.

Discussion: The decision to intervene in acute stroke events is not taken lightly, as the dynamic nature of these events is not always predictable. Hence, a multidisciplinary and individual approach of these patients might be warranted.