

ENDOVASCULAR TREATMENT OF A PATIENT WITH ACUTE RIGHT INTERNAL CAROTID ARTERY OCCLUSION

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HISTORY AND PHYSICAL

A 57 year-old woman with sudden onset of neurologic deficit – inability to speak and to move her left limbs. The patient was admitted in emergency unit, where neurologic consultation and CT scan was performed – hemorrhagic stroke was excluded. Thrombolytic therapy was started as bridge strategy and the patient was transferred to our hospital on the 4th hour from symptom onset MRI.

At hospital admission – central left-sided hemiplegia and motor aphasia with NIHSS 13 points, GLCS - 17.

Doppler-sonography data of RICA occlusion, no blood flow detected in right MCA and ACA.

Carotid angiography: acute thrombosis of RICA, TIC1 0 flow in right MCA and ACA.

INDICATION FOR INTERVENTION

Class IIb B indication for endovascular interventions by AHA/ASA guidelines: rescue IA fibrinolysis or mechanical thrombectomy may be reasonable approaches to recanalization in patients with large artery occlusion who have not responded to IV fibrinolysis.

INTERVENTION

Planned procedure was recanalization of RICA with Penumbra system. Access: right femoral approach with 6Fr sheath. A selective cannulation of RCCA with 6 Fr catheter Benchmark was performed, followed by introduction of ACE catheter in the proximal part of RICA. Multiple thromboaspirations were performed in RICA with Penumbra aspiration system. Over a 0,014” wire catheter 3MAX was placed in M1 segment and several thrombaspirations were performed with ACE 64 catheter. Post procedure angiography revealed no residual thrombosis with excellent angiographic result, TIC1 3. Total time to recanalization from groin puncture was 60 minutes.

LEARNING POINTS

Trascatheter mechanical recanalization is great therapeutic option of acute carotid and MCA occlusions. We achieved excellent and fast recanalization, however clinical outcome was not optimal due to reperfusion hemorrhagic transformation in the ischemic right basal ganglia area. The patient was discharged on day 7 with NIHSS 10 and mRS 4. Modified Rankin scale was 3 at 90 days.