

European Stroke 2020: Occlusion of Internal Carotid Artery Ostium causing Acute Ischemic Stroke: Incidence among Large Vessel Occlusions and Results of Endovascular Treatment.

Anna E. Udovichenko, Russia

Ischemic stroke caused by large vessel occlusion (LVS) is one of the most disabling but the same time perspective for the modern treatment disease. However, endovascular treatment in the most of the cases should include not thrombectomy (TE) alone but also maintain the artery patency.

We analyse the data base of all TE cases performed in Pirogov' Moscow City Hospital #1 from May 2015 to August 2019. The total TE number was 207 cases, and only 32 cases (15,4%) were associated with internal carotid artery (ICA) ostium occlusions (occlusions in C1 segment of ICA). Among this 33 patients 15 (45,4%) demonstrated isolated C1 occlusions, while the rest had tandem occlusions (C1 + C7 or C1 + M1). The mean NIHSS score was quite high – 15,4 +/- 6,6. As a first line treatment all of the patients have undergone TE (aspiration). Than the strategy depended on the presence and degree of residual stenosis in ICA ostium.

In this 33 men group totally 8 patients (24,2%) were stented (7 at the time of TE, 1 after 36 hours after TE), 9 patients (30,3%) underwent balloon angioplasty (BA). Among those patients treated with BA, only in 3 the arterial reconstruction were performed later (2 carotid endarterectomy and 1 deferred stenting). The following clinical results were obtained: 9 patients (27,3%) demonstrated excellent result of the treatment being discharged with NIHSS 0-2 and mRS 0-1; 4 patients (12,1%) were dramatically improved and discharged with NIHSS 3-6 and mRS 2-3 (all these patients became better in 90 days and progressed to mRS 0-1); 3 more patients (9%) were NIHSS 7-10 and mRS 3-4 at the time of discharge and improved to mRS 2 after 90 days. Total “positive results” were obtained in 48,5% of the patients.

4 Patients (12,1%) were discharged with NIHSS more than 10 and mRS 4-5; they still stayed dependent on the assistance at 90 days with mRS 3-4. 7 Patients (21%) died due to progression of the stroke and hemorrhagic transformation at the early post-operative period.

Conclusion: in acute stroke patients with ICA ostium occlusions most of the patients require additional to TE techniques to maintain the artery patency. The method of treatment may differ and should consider the potential

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