

INTRA AND POST OPERATIVE COMPLICATIONS OF CLASSICAL CAROTID ENDARTERECTOMY (EP-0996)

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Objective

To study the incidence of intra and post-operative complications of classical carotid endarterectomy

Materials and methods. A retrospective study was carried out from 2016 to 2019 in the neurosurgical department in Nizhny Novgorod regional hospital, Semashko. 130 patients with carotid stenosis of atherosclerotic genesis of varying severity (excluding patients with occlusive vascular lesions of the carotid artery). The diagnosis was carried out using classical clinical and neurological examination and imaging research methods, such as ultrasound angiography and multispiral computed tomography-angiography (MSCTA).

In accordance with modern concepts of the clinical course of stenotic vascular lesions of the brachycephalic system, patients were divided into 2 groups: 1st group - patients with a recent episode of acute cerebral ischemia (88 patients, among them: TIA - 13 patients; II in the middle cerebral artery (SMA) - 42 patients) and, accordingly, patients with so-called "Asymptomatic" nature of the disease - 5 people. The degree of stenosis of the affected artery was respectively: $> 60\%$ - 1 case, from 60–70% - 24 cases, from 70–90% - 29 cases. Gender and age principles all observations were distributed as follows: the average age of the operated patients was 67 years old, among which 96 are men and 34 women. All patients underwent cerebral revascularization by performing classical CEAE under intravenous anesthesia in combination with mechanical ventilation.

Results.

When analyzing cases of the development of acute ischemia as a result of surgical treatment of stenotic lesion of the vessels of the carotid artery, the following results were obtained by performing classical carotid endarterectomy.

The complications which occurred were grouped into intra and post-operative, Intra operative stroke developed in 1 case (0,76%) as a result of hypo perfusion during temporary intraoperative clamping of the carotid arteries. In the described observation there was a lethal outcome. The post-operative complications were cerebral ischemia-2 (1,53%) as a result of postoperative thrombosis of the carotid arteries, determined according to the results of postoperative MCT, hypertension 1 (0.76%) and 3 cases of post-operative headache -(2,03%)

Conclusion. Carotid endarterectomy is one of the most effective and safest methods of surgical correction of atherosclerotic stenotic lesion of the vessels of the carotid artery. The intra and post-operative complications in this study in patients operated at the neurosurgical department of Nizhny Novgorod regional hospital, Semashko in the period from 2016-2019, do not go beyond the limits of similar national and world indicators.

Further widespread use of preoperative imaging of the blood flow through the extra- and intracerebral vessels, the introduction of modern methods for assessing intraoperative cerebral perfusion, as well as improving the techniques of pre-, intra- and postoperative patient management can significantly improve the safety profile of this surgical intervention and minimize the risks associated with it.