Acute stroke and early carotid endarterectomy: a centre experience

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Introduction: Data from the literature concerning symptomatic carotid stenosis show that the long term benefits of surgery are greater when it is performed within 2 weeks after the event. The aim of this study is to evaluate our centre’s capacity and outcomes.

Methods: Forty-eight consecutive patients submitted to carotid endarterectomy (CEA) due to symptomatic carotid stenosis [3 ocular transient ischaemic attacks (TIA); 15 TIAs; 30 strokes] in a reference Vascular Surgery and Stroke centre were evaluated (July 2014 – June 2015). A prospective registry was made with follow-up from 6 months to a year. All the diagnoses were confirmed by a neurologist and a vascular surgeon. Patients with more than 180 days of waiting time for surgery were excluded (2 patients).

Results: The mean time from event to surgical proposal was 15 days (median 4) and from event to CEA was 28 days (median 10) (20 inpatients, 25 outpatients, 3 other hospitals). The median ABCD2 score after observation was 5. Ninety-two percent of the patients were operated under loco-regional anaesthesia, with 3 conversions to general anaesthesia (2 intra-operative deficits after clamping with necessity of shunt, 1 intolerance). Most of the patients were submitted to patch closure (88%) and 8% with eversion. Most of the patients needed reintervention due to neck hematoma, 1 had hyperperfusion syndrome and 1 had hypoperfusion syndrome. Thirty-day death/stroke rates were 0%, and at 1 year, 4 deaths were registered.

Conclusion: Fast-track protocols are needed for legis artis patient treatment. Primary referentiation also has to be optimized. Indications for surgery are well established and practiced. Surgery outcomes are according to the recommendations.