Ahamed Faleel A.F, Noorul Haq F.N. CAROTID ENDARTERECTOMY VERSUS STENTING IN MANAGEMENT OF CAROTID ARTERY STENOSIS

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Cerebral ischemic stroke is one of the main reasons for disability and death in elderly. Around 20% of all ischemic strokes are of Extracranial cerebrovascular disease origin. Carotid artery (CA) stenosis is one of such diseases where narrowing of the lumen due to plaque (90% Atherosclerotic) formation is seen. Carotid endarterectomy (CEA) was the only standard procedure for CA stenosis until Carotid artery stenting (CAS) was introduced in the 80s.

Despite both the procedures being excellent in treating CA stenosis in symptomatic and asymptomatic patients, each has its own advantages and disadvantages. Throughout history there has been many trials done to compare and evaluate CEA and CAS. This study was mainly focused on European trials And North American Carotid Revascularization Endarterectomy vs Stenting Trial (CREST).

In these trials, it was proven that CEA procedure was associated with low risk of post-procedural stroke and death rates as well as a minimal risk of embolization. These advantages are offset by the risk of surgical complications, myocardial infarction, surgical site hematomas and cranial nerve palsies. CAS is the best procedure to treat surgically inaccessible lesions and has lower risk of above-mentioned complications. One of the main disadvantages of CAS is the higher risk of embolic stroke and restenosis. Long term ipsilateral stroke risk is similar and low in both the procedures.

When considering all the advantages and disadvantages CEA is only slightly better at preventing complications than CAS. Therefore, it's necessary to carefully evaluate risks and benefits, discuss them with the patient and arrive at a conclusion on which procedure fits the patient the best.