STENTING IS AN EFFECTIVE PROCEDURE AND IN TIME MAY REPLACE SURGERY FOR MOST PATIENTS.

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Carotid endarterectomy (CEA) is now a gold standard of treatment of severe carotid stenosis, since it significantly reduces the long-term risk of subsequent stroke from severe carotid artery stenosis in symptomatic and asymptomatic patients. Recently the carotid stenting (CAS) has become an alternative method to CEA for stroke prevention. There are no consistent data on the comparison of both safety and efficacy of the two approaches. The Cochrane database reports a total of 1269 patients with carotid artery stenosis that were treated in five randomised trials (LEICESTER 2001,WALLSTENT 2001,CAVATAS 2001, KENTUCKY 2001, SAPPHIRE 2004), reporting a heterogeneity of outcome, no significant difference in the major risks of treatment, and the wide confidence intervals indicate that it is not possible to exclude a difference in favour of one treatment. In two recently published trials EVA and SAPCE comparing CAE and CAS a total of 1727 patients with symptomatic carotid stenosis have been enrolled but both trials were not be able to clarify the dilemma. The trials were stopped: the EVA 3S for the high complication rate in the stenting arm, and the SPACE trial for the lack of adequate funding that made impossible to enroll 2500 patients, needed to have an 80% power statistical analysis. The results of both trials are discouraging for the CAS arm: the 30-day stroke and death rates were not similar to those of contemporary CEA and CAS publications and registries. The unexpected deviation from the previous results can by explained mainly by the level of training and the heterogeneity of devices (e.g. With or without embolic protection) used in CAS arm, CEA has been widely performed during the last thirty years by experienced and fully trained vascular surgeons, while CAS is a recently emerged treatment that cannot yet be generalized. Both EVA 3S and SPACE didn't match an acceptable level of physician training. Twenty-five CAS procedures required in SPACE or almost similar in EVA 3S to enter the trial cannot be accepted as CAS is a procedure highly operator – dependent. In our centre we have learned that a patient with a specific carotid plaque morphology and supra-aortic anatomy needs a tailored procedure and additional expertise. A randomized trial comparing CEA and CAS is needed, where both rigorous standard of practice and technical skills will be required and where the use of an embolic protection device will be mandatory.