INTERVENTIONAL ARTERIAL PROCEDURES FOR ASYMPTOMATIC CAROTID STENOSES O. Bajenaru

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Several clinical trials of carotid endarterectomy (CEA) for patients with asymptomatic carotid stenosis have been conducted, but their interpretation has been controversial because of more differences among these studies. But two large-scale, rigorous trials evaluating CEA in such patients with advanced stenosis (ACAS and ACST) reached to similar favorable conclusions, despite an important time and space separation between them. These two trials offer the best outcome-based data for patients with asymptomatic carotid stenosis, but also the results of other meta-analyses show convincingly that CEA reduces the risk of stroke ipsilateral to stenosis for highly selected patients. The selection refers to the fact that the benefit is significant for men, and not for women, with a high grade of stenosis (more than 70%), younger than 75 years-old and with a greater life expectancy. The risk of stroke is significantly reduced at 5 years and the data suggest that the benefits from CEA could be even larger by 10-year follow-up, especially if the interventional procedure is additional to the best medical treatment and not replacing it (antihypertensive, antiplatelet and statin treatment). Carotid angioplasty-stenting (CAS) might be a reasonable alternative to CEA in asymptomatic patients at high risk for surgical procedure. All the above are true only if the procedures are achieved in medical centers with periprocedural complications rate as low as those reported in the trials (less than 3%). Patient selection for interventional procedures should also be guided by an assessment of comorbid conditions and life expectancy, as well as other individual factors (AHA Guidelines). Additional high-risk patient groups for interventional arterial procedures could be: those with a history of congestive heart failure, those undergoing prophylactic CEA in combination with coronary surgery, the detection of ulceration on the atherosclerotic plaque, the higher values of baseline CRP and diabetes mellitus with an inadequate glycaemic control defined by a HbA_{1C} higher than 7%.

Conclusion: an interventional arterial procedure (CEA or CAS) in patients with asymptomatic carotid stenosis could be significantly beneficial for these patients only when a rigorous selection of patients and medical centers is done, and associated to the best medical treatment.