IS SURGERY BETTER THAN STENTING? DO DIFFERENCES EXIST BETWEEN CAROTID ENDARTERECTOMY (CEA) VS. CAROTID STENTING (CAS) OR THE RESULTS ARE SIMILAR AFTER CREST TRIAL?

D. Bartko[1,2], I. Combor[1], K. Zelenak[3], V. Sefranek[4], Z. Gombosova[1,2]
1Central Military University Hospital, Ruzomberok, Slovak Republic
2Institute of Medical Sciences, Neurosciences, Military Health, Ruzomberok, Slovak Republic
3Dept. of Radiology, University Hospital, Martin, Slovak Repblic
4National Institute of Cardiovascular Diseases, Bratislava, Slovak Republic
bartkod@uvn.sk

Introduction: ICSS and CREST trials have changed opinions on CEA-CAS. What is reality?
Aim: To analyse present situation concerning the last results of both procedures.
Material, Methods: All trials concerning CEA/CAS, published until now, mainly ICSS (2010) and CREST (2010).
Results: CAS offers similar results to CEA in symptomatic/asymptomatic carotid stenosis regarding early risk of stroke, heart attack, death. But 1.age of patients made a difference in outcome: CAS results at age 69yrs and younger were slightly better, conversely, in patients 70yrs and older surgical results were slightly superior to stenting.2.Quality of life (QoL) after recovery: CREST patients suffering heart attack reported better QoL than patients suffering stroke. 3. Symptomatic participants had suffered a non-disabling stroke or TIA within the previous six months. Asymptomatic patients had not had a stroke or TIA during the same time. 4. no sex differences were found.For decison which of these procedure is better to use, it is necessary to take into account various conditions:
1. plaque characteristics,severity of stenosis:irregular plaque represents risk during CAS(particles may be projected intracranially),severe stenosis makes difficulties.2.smooth, long lesions are best treated with CAS comparing to CEA. 3.comorbidities are also risk: a)carotid surgery represents risk for cardiac ischemia,4.hyperperfusion with headaches,brain edema/hemorrhage is more common after CEA,4.important determinants for outcome are a)patients selection, b)adequacy and type of pre-operative medical treatment, c)skills and experiences of performing physicians.
Conclusions
CAS offers similar results to CEA in symptomatic/asymptomatic carotid stenosis It is technically feasible, but there exist some differencies regarding age, myocardial comorbitity, patient selection, cerebrovascular reserve and experiences/training of performing radiologists
Supported by the gov/intrn. grants APVV0586-06,LPP0186-06,MS008KU-8/2008.