of n-3 fatty acids in patients with previous myocardial infarction or heart failure. The authors suggest primary benefit of n-3 fatty acids is antithrombogenic in patients, such as those with previous myocardial infarction or heart failure, who are perhaps more prone to venous arthralgic events.

Malignant Emboli on Transcranial Doppler During Carotid Stenting Predict Postprocedure Diffusion-Weighted Imaging Lesions


Conclusion: There is a high incidence of embolic signals during carotid artery stenting, especially when devices are deployed. Malignant macroemboli predict new images on diffusion-weighted magnetic resonance imaging (DWI). Summary: It is now clear that carotid angioplasty and stenting (CAS) procedures have an increased risk of periprocedural stroke compared with endarterectomy (ECA). This is because the risk of CAS is divided into 11 procedural steps. Embolic signals on TCD were counted and classified based on the relative energy index of microembolic signals as microemboli of one or less or malignant macroemboli as more than one. All patients had poststenotyping MRI. The predictive value of TCD-detected emboli for new diffusion-weighted imaging (DWI) lesions was evaluated with a negative binomial regression model. The study enrolled 30 patients, and seven were asymptomatic. The median embolic signal count was 212.5 (108 microemboli and 80 malignant macroemboli). The highest median embolic signals occurred during stent deployment, with a signal count of 58. This was followed by protection device deployment with a signal count of 30 (P = .0006). Twenty-four patients (80%) had new DWI lesions on post-CAS MRI. The median DWI count was 2 (interquartile range, seven). Two patients (6.7%) had new or worsening clinical deficits post-CAS. For every malignant embolus, the expected count was equally common (both 3.2%; not significant).

Outcomes of Carotid Endarterectomy in the Elderly: Report From the National Cardiovascular Data Registry


Conclusion: For patients undergoing carotid endarterectomy (CEA), those aged >85 years are at increased risk for death or perioperative complications of stroke, death, and myocardial infarction (MI) compared with younger patients. Summary: There are case series of CEA that suggest the perioperative risk in elderly patients is comparable with that in younger patients (Durward QJ et al, Arch Surg 2005;140:625-8). However, administrative databases and systemic reviews have suggested CEA in the elderly patient has increased operative times and heightened supervision of participating surgeons.

Risk Factors for Early Failure of Surgical Amputations: An Analysis of 8,787 Isolated Lower Extremity Amputation Procedures


Conclusion: The risk of early amputation failure can be decreased by increased operative times and heightened supervision of participating surgical trainees. Summary: Nearly 100,000 lower extremity amputation procedures are performed in the United States each year for complications of critical

Prevalence of Stenoses and Occlusions of Brain-Supplying Arteries in Young Stroke Patients


Conclusion: One-fifth of young patients with stroke have asymptomatic or symptomatic large-artery atherosclerosis. Summary: Significant extracranial atherosclerotic carotid stenosis and occlusions in adult stroke patients of all ages (21-94 years) occur in 11% to 22% (Bogousslavsky J et al, Stroke 1988;19:1083-92 and Wasay M et al, Stroke 2009;40:705-12). However, in younger patients with stroke, atheroembolic changes in the extracranial and large intracranial arteries have not been considered a major etiology of stroke.

There were 4149 patients analyzed from January 2005 to March 2011, predominantly from 171 hospitals. The study used the National Cardiovascular Data Registry (https://www.ncdr.com/webncdr/care/; White CJ et al, Catheter Cardiovasc Interv 2008;71:353-62). The authors postulate that investigating the relative safety of the steps of CAS by performing intraoperative transcranial Doppler (TCD) monitoring and correlating TCD findings with diffusion-weighted MRI (DWI) is a missed opportunity. This was a welldesigned and executed study of CAS procedures performed during CAS procedures. For purposes of the study, CAS was divided into 11 procedural steps. Embolic signals on TCD were counted and classified based on the relative energy index of microembolic signals as microemboli of one or less or malignant macroemboli as more than one. All patients had poststenotyping MRI. The predictive value of TCD-detected emboli for new diffusion-weighted imaging (DWI) lesions was evaluated with a negative binomial regression model. The study enrolled 30 patients, and seven were asymptomatic. The median embolic signal count was 212.5 (108 microemboli and 80 malignant macroemboli). The highest median embolic signals occurred during stent deployment, with a signal count of 58. This was followed by protection device deployment with a signal count of 30 (P = .0006). Twenty-four patients (80%) had new DWI lesions on post-CAS MRI. The median DWI count was 2 (interquartile range, seven). Two patients (6.7%) had new or worsening clinical deficits post-CAS. For every malignant embolus, the expected count was equally common (both 3.2%; not significant).

Comment: It is a little hard to know what to make of these data. There were 4149 patients analyzed from January 2005 to March 2011, predominantly from 171 hospitals. This roughly equates to 25 CEAs per year in each of these hospitals in patients aged >50 years. Either a lot of potential data are not being analyzed or these are very low-volume CEA hospitals. Therefore, although enough numbers are here to do statistics analysis, it is very unclear whether the patients analyzed are truly representative of those undergoing CEA across the United States. Nevertheless, likely at the disappointment of the authors, the overall perioperative risk of complications after CEA in the elderly analyzed within this registry was still within guidelines for CEA.