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The Impact of Periprocedural Myocardial Infarction on Long-Term Outcomes After Carotid Artery Stenting
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Background: Previous studies comparing carotid artery stenting to carotid endarterectomy have shown an increased risk of periprocedural myocardial (MI) associated with endarterectomy. While findings from the CREST trial revealed that periprocedural MI has a lesser effect on health status at 1-year compared with stroke, other studies have demonstrated a strong correlation between periprocedural MI and long-term mortality. The impact of periprocedural MI after carotid artery stenting on both 30-day and 1-year mortality has never been clearly indentified.

Methods: SAPPHIRE Worldwide is a prospective, multicenter, observational study to evaluate the risk of major adverse events (MI, death and stroke) after carotid stenting by investigators with varied levels of experience and utilizing a formal training program.

Results: To date, over 10,000 patients have been enrolled and completed 30 day follow up. More than 7,000 of these patients have completed 1-year follow up evaluation. Thirty percent of those enrolled were symptomatic and 46% were age 75 years or older. Periprocedural MI occurred in 0.6% patients (9 Q-wave, 54 Non-Q wave), and one additional Q-wave MI occurred between 30 days and 1 year. Of patients who experienced an MI, 22% resulted in periprocedural death and 36% resulted in death at 1-year follow up.

Conclusion: The incidence of periprocedural MI, although less frequently seen after stenting than endarterectomy, can result in a high rate of mortality in both the short and long term. Identification of patients at high risk for periprocedural cardiovascular events is an important consideration prior to carotid revascularization.

Peripheral Vascular Intervention (non carotid, non neurovascular)

TCT-554
The iliac side branch: for all or only the few? - a morphological suitability study
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Background: Endovascular aneurysm repair for aneurysms extending to the iliac artery is still a challenge. Interventional occlusion of the hypogastric artery and thus creating a distal landing zone in the external iliac artery is a common method with method specific morbidity (buttck claudication, impotence). As alternative iliac side branch stentgrafts can maintain pelvic blood supply, but the morphological applicability is limited. Aim of the study was to investigate the morphological applicability of commercially available iliac side branch grafts (COOK Zenith branched graft - ZBIS) in our patients' population with aortoiliac aneurysms.

Methods: A retrospective single-centre study was conducted of 50 patients (45 men; median age 71.5 years, range 53-90) undergoing repair of aortoiliac aneurysms (open repair, femorofemoral bypass). A total of 357 pts were included (mean age 66, ±12 y) underwent percutaneous treatment for subclavian artery(SA) occlusive disease (stenosis:254, occlusion:92) Left:272, Right:85. Stents:67. Stent grafts:13. A. iliaca externa:41. A. iliaca communis:1. 80% specificity and 65% sensitivity. Importantly, there were no differences in IM versus IA application after 6 months in all observed parameters.

Conclusion: Higher CD34+ cells concentration, and lower degree of inflammation are associated with better clinical therapeutic response to BMC therapy in pts with CLI. Both IM and IA cells delivery are effective and comparable therapeutic strategies.