CORONARY

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Abstract Withdrawn

CRT-200.88
Screening Carotid Ultrasound in Patients Undergoing Cardiac Surgery: Does Severity of Carotid Stenosis Predict Post-Operative Cerebrovascular Accidents?

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BACKGROUND Guidelines recommend that high-risk patients be screened for carotid artery disease prior to cardiac surgery. High-risk patients are defined as those with age >65 years, left main disease, peripheral arterial disease, history of cerebrovascular disease, hypertension, smoking or diabetes.

OBJECTIVE Identify the incidence of carotid artery disease and outcomes of cardiac surgery. Endpoints include in-hospital mortality and cerebrovascular events.

METHODS A retrospective analysis of LAC+USC Medical Center and Keck Medical Center coronary artery bypass patients from January 2008 to December 2013 was performed.

RESULTS We identified 793 patients (77% male, 23% female); average age was 60 years. The majority of the patients underwent pre-operative carotid screening with ultrasound (86%). Significant carotid artery stenosis (≥80%) was found in 55 patients (6.9%). Patients with significant carotid stenosis were more likely to be older (67.8±8.9 years vs. 59.7±8.8 years, p<0.0001), more likely to have peripheral arterial disease (7 (12.7%) vs. 32 (5.1%), p 0.02) and more likely have a history of a prior cerebral vascular events (9 (16.4%) vs. 44 (7.0%), p 0.01). Eighteen patients (2.3%) underwent carotid endarterectomy (CEA). Twelve CEA were combined procedures with coronary artery bypass surgery, two were done post-bypass and four were done pre-bypass. Two of the 18 CEA were done for symptomatic carotid stenosis the remaining patients were asymptomatic. There were no significant differences in cerebral vascular events between those with significant stenosis and those without. There were 12 post-operative cerebrovascular events (1.5%) of these only two were in patients with significant carotid stenosis. Overall in-hospital mortality was 1.6%. There was a significant difference in mortality between those with significant carotid stenosis and those without (4 (7.3%) vs. 5 (0.8%), p 0.004).

CONCLUSION The incidence of significant carotid stenosis is low and even lower for those requiring perioperative intervention. Severe carotid stenosis does not predict post-operative cerebrovascular events. Mortality was significantly higher among those with significant carotid disease. This increase in mortality is not due to an increased rate of cerebrovascular events. Given the low rate of significant carotid stenosis and lack of ability to predict cerebral vascular events routine pre-operative screening for carotid stenosis is not of benefit.

CRT-200.89
Incidence and Risk Factors of Atherosclerotic Carotid Disease Among Patients With Known Coronary Artery Disease at an Urban Safety Net Hospital

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BACKGROUND High-risk patients for severe carotid stenosis are defined as those with age >65 years, left main disease, peripheral arterial disease, history of cerebrovascular disease, hypertension, smoking or diabetes. Little has been published on patients from low socioeconomic populations and minority groups.

OBJECTIVE Identify incidence and pertinent risk factors of carotid disease in indigent patients with known coronary artery disease.

METHODS A retrospective analysis of LAC+USC Medical Center coronary artery bypass patients from January 2008 to December 2013 was performed. Patient demographics admitted to our institution during this time period were primarily non-Caucasian patients (88.5%), of which almost half where Hispanic (47.4%). A univariate and multivariate analysis were performed to identify pertinent risk factors for atherosclerotic carotid disease among our patients.

RESULTS There were 574 (76.8% male, 23.2% female) patients that underwent coronary artery bypass grafting that had carotid

ultrasounds performed. Of these patients 34 (5.9%) had significant carotid stenosis of ≥80%. The average age of the patients was 59.3±8.1 years. Patients with severe carotid stenosis were significantly older (59.1±8.2 vs. 61.4±6.1, p 0.05). Left main disease (odds ratio 2.18, 95% CI 1.05-4.50, p 0.03) and a history of cerebral vascular event (odds ratio 3.35, 95% CI 1.24-8.22, p 0.01) were significant risk factors for significant carotid stenosis. Post-operative cerebral vascular events occurred in 12 patients (2.1%). There was no significant difference in post-operative cerebral vascular events between those with significant carotid stenosis and those without. Overall in-hospital mortality was 1.2%. There was a significant difference in mortality between those with significant carotid stenosis and those without (3 (8.8%) vs. 4 (0.7%), p 0.006).

CONCLUSION The incidence of significant carotid stenosis in this population is low. Patients with severe carotid stenosis were significantly older than those without. Of the risk factors reported in guidelines only presence of left main disease and a prior history of cerebral vascular event were significant risk factors for severe carotid stenosis in this population. In our population incidence of severe carotid stenosis is lower than others have previously reported and traditional risk factors were not as predictive.

CRT-200.90
Percutaneous Coronary Intervention With Platinum Chromium Everolimus-eluting Stent Versus Coablt Chromium Everolimus Eluting Stent and Second Generation Paclitaxel-eluting Stents (REWARDS Premier TLX Trial)

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BACKGROUND The Promus Premier eluting stent (PPES) features a customized platinum chromium stent architecture, everolimus drug and PVDF-HFP polymer combination. It designed to enhance the mechanical properties of the PROMUS Element drug eluting stent. This study aimed to report the performance of PPES in contemporary practice in the US.

METHODS The Registry is a physician-initiated, retrospective, multi-center, observational study for all patients >18 years subjected to percutaneous coronary intervention. Baseline, procedural, and follow-up data at 9 months were collected from 10 centers electronically. The performance of the PPES was compared to historical control from a registry which utilized second generation Paclitaxel eluting Taxus Liberte (PES) to second generation cobalt chromium everolimus eluting DES (EES). The study's primary endpoint was major adverse cardiac events: all-cause death, Q-wave myocardial infarction, target vessel revascularization, and stent thrombosis. Complete data will be available upon presentation.

RESULTS Data were entered for 1998 patients (PPES, n = 858, PES, n = 595; EES, n = 600). Baseline clinical characteristics and in-hospital outcomes were similar, with an overall in-hospital stent thrombosis rate of 0.2%. The primary endpoint at 9 months was statistically lower in the PPES, 5.4%, as compared to PES, 11.6%, and EES 8.0% (p <0.001). Overall target lesion revascularization was low in all groups, and stent thrombosis rates was similar in the PPES, and EES groups; however, there was a significantly lower rate of all-cause mortality at follow up in the PPES group. (Table)

CONCLUSION Second-generation PPES has similar performance when compared to cobalt chromium EES and for the composite efficacy and safety end points, PPES and EES outperformed second-generation PES.

Follow up	PPES N= 858	EES N=595	PES N=600	P value
MACE	5.4%	8.0%	11.6%	<0.001
Death	0.5%	1.3%	2.0%	0.023
Any MI	1.9%	1.7%	2.7%	0.407
Target Lesion revascularization	3.0%	4.0%	4.7%	0.248
Stent Thrombosis	1.0%	0.2%	1.0%	0.098