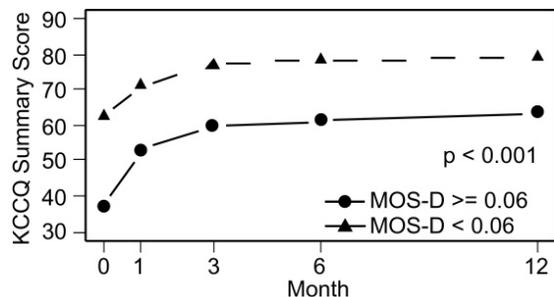


strongly associated with worse health status. Depression interventions should be evaluated in this population with the goal of improving cardiac symptoms and quality of life.



1115-72 Aggressive Treatment of Atrial Fibrillation Reduces Stroke Following Cardiac Surgery

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Background: Stroke is an occasional complication of cardiac surgery. Most strokes associated with cardiac surgery are postoperative strokes (POS) and occur after the patient appears to have recovered from anesthesia uneventfully. Postoperative atrial fibrillation (POAF) is a frequent complication of cardiac surgery. POAF is a risk factor for POS. It is not known whether treating or preventing POAF will decrease POS. **Purpose:** Determine if POS can be reduced by aggressive treatment of POAF. **Methods:** Historical review of all patients undergoing cardiac surgery for coronary artery bypass graft (CABG) and/or cardiac valve surgery at our institution between 1/1/93 to 6/30/2003. Group (A) patients (1/1/93 to 6/30/1999) served as control before aggressive POAF treatment protocol instituted. Group (B) patients (7/1/1999 to 6/30/2003) were treated with measures to prevent POAF (beta blockers, magnesium supplementation, pre and post-operative amiodarone therapy). Antiarrhythmic agents were administered if POAF occurred. DC cardioversion was performed if POAF persisted > 24 hours. If POAF persisted despite cardioversion and antiarrhythmics, anticoagulant therapy was instituted with heparin. Patients were then placed on warfarin until normal sinus rhythm persisted. **Results:** A =2084 patients and B =2212 patients were similar with respect to age (65.2 vs 66.3), % male sex (68.1 vs 68.6), ejection fraction (53.8 vs 52.7), and prior atrial fibrillation (9.4% vs 9.0%). More B patients had valve surgery (19.8% vs 13.7% p<0.01), were hypertensive (68.9% vs 57.9%, p<0.01), and had their CABG done "off pump" (57.7% vs 1.8% p<0.0001). The incidence of POAF was 32.7% in A and 20.3% in B, (p<0.001). In valve patients, the incidence of POAF was 40.6% in A and 24.9% in B, (p<0.01). The incidence of POS was 2.35% in A and 0.8% in B, (p<0.001). In group B CABG patients, the incidence of POS and POAF was similar regardless of the "on pump"/ "off pump" status. **Conclusion:** Aggressive measures to prevent and treat POAF were associated with a significant decrease in the occurrence of stroke following cardiac surgery.

1115-73 Sinus Bradycardia Is a Poor-Prognostic Indicator in Cocaine-Induced Acute Coronary Syndromes

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Background: Cocaine is a complex drug and its use can cause lethal cardiovascular events, including myocardial infarction (MI) and sudden cardiac death due to ventricular arrhythmias. Isolated case reports have implicated cocaine-induced bradyarrhythmias as the cause of syncope. However, the adverse effects of cocaine-induced sinus bradycardia have not been studied. The objective of this retrospective study is to examine the prognostic relationship of cocaine-induced acute coronary syndrome (ACS) and sinus bradycardia.

Methods: A total of 1,199 patients meeting prospectively defined and retrospectively validated ACS criteria were entered into a registry at two inner-city hospitals. 58 (5%) patients used cocaine either by self-report or positive urine drug screen. The analysis of the relationship of sinus bradycardia (Heart Rate < 60 bpm) to rates of Rehospitalization, Major Adverse Cardiac Events (MACE-myocardial infarction, stroke, congestive heart failure, and death) and the degree of Coronary Artery Disease (CAD) was performed among the 58 patients with cocaine-related ACS.

Results: Of the 58 patients, 12 (21%) patients were admitted with sinus bradycardia as their initial rhythm. Patients' characteristics and treatment as defined by age, gender, hypertension, smoking, left ventricular function, and beta blocker use between those with and without bradycardia were similar. Rehospitalization was more common in patients with bradycardia (83.3% vs. 47.8%; p=.028). The incidence of occlusive CAD was also higher among patients with sinus bradycardia (83.3%) vs. patients without sinus bradycardia (45%) p=0.099. The percentage of MACE among cocaine-related ACS patients with sinus bradycardia trended to be higher (25%) vs. non-sinus bradycardia cocaine-related ACS patients (13%) p=.308.

Conclusion: Patients admitted with cocaine-induced ACS and bradycardia have higher rate of Rehospitalization and are more likely to have occlusive coronary artery disease and trend towards having more MACE. The underlying pathophysiology for this intriguing finding needs to be explored further.

1115-74 Screening for Asymptomatic Coronary Artery Disease in the Potential Renal Transplant Recipient

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Background: Patients with end stage renal disease (ESRD) are at high risk for CAD. Screening has been recommended for asymptomatic ESRD patients awaiting transplant. A prior meta-analysis has shown that positive (+) nuclear perfusion scans (NPS) correlate with increased risk of cardiac death in this population. **Methods:** We reviewed 128 consecutive asymptomatic patients with ESRD awaiting renal transplant. All subjects underwent NPS for the evaluation of occult epicardial CAD (90% adenosine Sestamibi). We excluded subjects with h/o prior MI, known CAD, PVD, CABG or PCI. We compared baseline characteristics of patients with and without (+) NPS. A (+) NPS was defined as a reversible perfusion defect or a fixed defect with an underlying wall motion abnormality. **Results:** The mean age was 52 yrs and 56% were male. The primary etiology of ESRD was diabetes mellitus (DM) in 39%, hypertension (Htn) in 21% and miscellaneous in 40%. Overall, 31% (40/128) of subjects had positive NPS. Subjects with (+) NPS were similar to their counterparts with respect to age (53 vs. 50 yrs), African American race (68 vs. 68%), smoking (45 vs. 41%), LVH on ECG (38 vs. 41%), h/o CVA (10 vs. 8%), hyperlipidemia (33 vs. 33%), and need for dialysis (90 vs. 88%) with all p=NS. The gated LVEF was lower in subjects with (+) NPS (50 vs. 57%, p = 0.0009). Rates of test positivity with NPS were 44%, 36% and 24% in the group of subjects with Htn nephropathy, DM nephropathy and miscellaneous groups respectively (p= 0.05). Both DM (p= 0.07) and Htn nephropathy subjects (p= 0.02) had significantly higher rates of NPS than their counterparts with renal disease of miscellaneous etiology. Of the 19 patients with Htn/DM referred for cath, only 5 had a (+) angiogram ($\geq 50\%$ stenosis). **Conclusions:** The rate of (+) NPS in asymptomatic ESRD patients is high (31%) and is related to the underlying renal etiology. Subjects with DM or Htn nephropathy have significantly higher rates of (+) NPS. Patients with (+) NPS have a significantly lower LVEF; however, (+) NPS did not correlate with angiography. The previously reported increased risk of death with (+) NPS may not be related to epicardial CAD, but instead to decreased LVEF; alternative non-invasive modalities should be considered.

1115-75 Prognostic Impact of Depression Following Myocardial Infarction: A Meta-Analysis

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Background- To assess the impact of depression following myocardial infarction (MI) on cardiovascular prognosis.

Methods- Meta-analysis of references derived from MEDLINE, EMBASE and PSYCINFO (1975-January 2002) combined with cross-referencing, without language restrictions. We selected prospective studies which determined the impact of depression on the cardiovascular outcome of MI patients, defined as mortality and cardiovascular events within 2 years from index MI. Depression had to be assessed within 3 months after MI using established psychiatric instruments.

Results- 17 papers met our selection criteria. These studies described follow up (on average 12.8 months) of 3803 MI patients (12 cohorts). Post MI depression was significantly associated with all-cause mortality (OR fixed 2.58, 95% CI 1.71-3.89; p<0.00001) and cardiac mortality (OR fixed 2.50, 95% CI 1.71-3.68; p<0.00001). Depressive MI patients were also at risk for new cardiovascular events (OR fixed 2.12, 95% CI 1.52-2.95; p<0.00001). Secondary analyses showed no significant effects of follow up duration (0-6 months or longer) or assessment of depression (self-report questionnaire versus interview). However, the year of data collection (before or after 1992) significantly influenced the effect of depression on mortality (p=0.05), with stronger associations found in the earlier studies.

Conclusion- Post MI depression is associated with a 2-2.5 fold increased risk of impaired cardiovascular outcome. The impact of depression on cardiac mortality or all-cause mortality was more pronounced in the older studies (before 1992) than in the more recent studies.

1115-76 Effect of Body Mass Index on Long-Term Mortality in Patients Undergoing Coronary Artery Bypass Graft

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Background: It is unclear whether obesity predicts long term mortality after CABG. We sought to quantify the effect of BMI on long term mortality in a large data base of patients undergoing CABG.

Methods: We studied CABG patients from 1970 to 1991 in the Emory University Health-care System and compared mortality risk between 5 BMI groups, adjusting for baseline demographic and clinical characteristics using Cox proportional hazards models. Mean follow up was 9.3 years.

Results: Of 15,096 patients discharged alive, 3.2% were underweight (BMI <20), 34.9% had a normal weight (BMI 20 to 25), 45.2 % were overweight (BMI 25.1 to 30), 13.4% obese (BMI 30.1 to 35), and 3.3% severely obese (BMI >35). In unadjusted analysis, only underweight patients were at increased mortality risk compared with normal-weight patients. In adjusted analysis, underweight, obese and severely obese patients showed an increased mortality risk, while being overweight was not associated with higher mortality compared with normal-weight patients.