of 30-day mortality among diabetics. Conclusions: Despite the contemporary management, diabetic patients with non-ST-segment elevation acute coronary syndromes have almost doubled 30-day mortality than nondiabetics.

In addition, older patients with cardiac risk factors, previous CAD or persistent LV dysfunction. 75 (4.7%) with ST elevation. Of the 171 pts with cardiac enzymes, 75 (4.7%) had myocardial injury (n=5). 3 Pts had an out of hospital cardiac arrest leading to anoxic brain injury and 10 (4.7%) with ST elevation. Revascularization was more likely to present with ST elevation/LBBB than patients without prior CABG. The unadjusted mortality for ST elevation/LBBB patients was higher in patients with prior CABG compared to those without (16.2% vs 14.1%, P=0.001) whereas in patients without ST elevation/LBBB, prior CABG patients had a lower unadjusted mortality than patients without prior CABG (10.1% vs 12.4%, P=0.001). Adjusting for baseline differences, prior CABG was weakly associated with in-hospital mortality in patients presenting with ST elevation/LBBB (add odds ratio (OR), 1.1, 95% confidence intervals (CI) 1.00-1.23), whereas prior CABG did not correlate with in-hospital mortality in patients presenting without ST elevation/LBBB (OR 0.99, 95% CI 0.92-1.07).

Conclusion: Patients with prior CABG who present with acute MI are more likely to present without ST elevation/LBBB, as compared to patients without prior CABG. Prior CABG was weakly associated with in-hospital mortality in patients with ST elevation/ LBBB, and did not influence in-hospital mortality in patients without these electrocardiographic findings. This suggests the difference in absolute mortality rates between patients presenting with MI and with and without a history of prior CABG are in large part due to differences in baseline characteristics.

ORAL CONTRIBUTIONS

841 Acute Coronary Syndromes: Clinical Outcomes

Tuesday, March 19, 2002, 8:30 a.m.-10:00 a.m.

Georgia World Congress Center, Room 160W

8:30 a.m.

841-1 Outcome After Acute Myocardial Infarction in Young Patients: Analysis of the PAMI Database


Background: Acute myocardial infarction (AMI) in patients (pts) ≤ 40 years old (y/o) is uncommon. Few data exist regarding the outcome of these pts after percutaneous intervention (PCI) for AMI.

Methods: This analysis pooled pts from 7 PAMI studies for a total of 4017 pts. Pts ≤ 40 y/o (n=171) were compared to pts > 40 y/o (N=3846). In-hospital, 6-month, and 1-year outcomes are reported.

Results: Younger pts were more often male and had a significantly higher incidence of smoking and family history of CAD, but a lower incidence of hypertension, diabetes, stroke, and prior coronary intervention compared to pts > 40 y/o. Younger pts had larger infarct sizes as measured by peak CPK (297.4 ± 2016 vs. 297.4 ± 2016, p=0.000) but no significant difference in ejection fraction at baseline (50% vs. 48%) or 6 months (54% vs. 55%) compared to older pts. Younger pts had less multivessel disease (p=0.001) and greater achievement of TIMI 3 flow (99% vs. 92%, p=0.000) after PCI. While pts ≤ 40 y/o had less mortality compared to older pts, recurrent AMI was significantly higher in the younger population (p=0.012).

In multivariate analysis, age ≤ 40 was the most significant predictor of re-infarction at 1 year (CR=3.82 [95%CI: 1.79-7.29], p=0.003).

Conclusions: While pts ≤ 40 y/o have improved survival after AMI, they have an increased rate of nonfatal re-infarction at 1 year compared to older pts. These data suggest the need for comprehensive diagnostic evaluation, aggressive risk factor modification, and intensive follow-up in young pts with AMI.

8:45 a.m.

841-2 Interleukin-1 Beta Predicts Death or Myocardial Infarction Independently of High-Sensitivity C-Reactive Protein and Standard Risk Factors in Patients With Coronary Artery Disease

Jason M. Liao, Joseph B. Muhsleh, John F. Carquest, Brent P. Davis, Benjamin D. Horne, Jeffrey L. Anderson, LDS Hospital, Salt Lake City, Utah, University of Utah, Salt Lake City, Utah.

Background: Interleukin (IL-1) beta, tumor necrosis factor alpha (TNFalpha) and IL-6 are important proinflammatory cytokines. IL-6 is produced in response to IL-1 and TNFalpha and is one of the major inducers of C-reactive protein (CRP). Elevated high-sensitivity (hs)CRP is associated with an increased risk of death and MI in patients with CAD. The objective of this study was to determine whether IL-1, IL-6 or TNFalpha also independently predict death or MI in CAD patients.

Methods: A nested case control study evaluating levels of IL-1 beta, IL-6, TNFalpha, and hsCRP (measured on the automated DPC Immulite platform) in 324 patients with significant angiographically-proven coronary artery disease (>1 lesion of >70% stenosis) was performed. Overall, 167 patients died or had an MI (cases), and 167 patients were event-free (controls). Cases were matched 1:1 to controls by age, gender, and time period of angiogram. Other cardiovascular risk factors were recorded and patients followed for 3.6±0.75 years (range: 2.0-5.0 years).

Results: Average age was 68.6±9.8 years and 74% of patients were male. In multivariable Cox regression controlling for 11 covariables, hsCRP (hazard ratio [HR]=1.24 per tertile, 95% confidence interval [CI]=1.02-1.5, p=0.03) and IL-1 beta (HR=1.32 per tertile, CI=1.08-1.6, p=0.008) were independently predictive of death/MI, but IL-6 (p=0.06, tracked with hsCRP) and TNFalpha (p=0.97) did not predict events. IL-6 and hsCRP were mildly correlated (r=0.39) and IL-1 beta nominally correlated with TNFalpha (r=0.24). No cytokine nor hsCRP was correlated with cholesterol levels. When analyzed jointly, having a high hsCRP (tertile 3) and high IL-1 beta (tertile 3) predicted a marked increase in events (HR=5.3, p<0.001) compared to low hsCRP (tertile 1) and low IL-1 beta (tertile 1).