Conclusion: Women admitted with decompenated heart failure appear to have better survival than men after hospital discharge. These results suggest that biological differences in the progression of heart failure are present even with advanced disease.

A Targeted Approach to Reducing Radiation Exposure in the Cardiac Catheterization Laboratory

Methods: Physicians and staff were required to demonstrate proficiency with a mandatory radiation-safety curriculum. In addition, fluoroscopic exposure time was documented and tracked during each procedure. Operators were informed at 10-minute intervals beginning after 30 minutes of exposure and warned if they were approaching a pre-determined threshold (60 minutes) associated with documented risk of radiation-induced skin injury. To determine the effectiveness of the program, we compared fluoroscopic times in 1,987 patients undergoing interventional procedures during the six-month interval before (n=569) and after (n=1,418) program implementation.

Results: Average fluoroscopic exposure time decreased from 14.5+3.1 to 9.7+3.7 minutes (p<0.001), a reduction of 31%. Furthermore, there was a 25% reduction in the number of patients sustaining prolonged fluoroscopic exposure (≥ 40 minutes). There was no statistical difference in baseline characteristics of the two groups, nor in the percentage of patients in whom factors expected to prolong fluoroscopic exposure time (multi-vascular intervention, intravascular ultrasound, measurement of fractional flow reserve or brachytherapy) were present.

Conclusion: Didactic education and real time feedback to physicians during intervention protocols reduced average fluoroscopic exposure times and the number of patients exposed to prolonged irradiation by approximately one-third. Equally significant is the simple program could significantly reduce the dangers of radiation exposure during interventional cardiology procedures.

Beta Carotene Increases All-Cause Mortality and Cardiovascular Death: A Pooled Analysis of Randomized Trials

Results: Average fluoroscopic exposure time decreased from 14.5+3.1 to 9.7+3.7 minutes (p<0.001), a reduction of 31%. Furthermore, there was a 25% reduction in the number of patients sustaining prolonged fluoroscopic exposure (≥ 40 minutes). There was no statistical difference in baseline characteristics of the two groups, nor in the percentage of patients in whom factors expected to prolong fluoroscopic exposure time (multi-vascular intervention, intravascular ultrasound, measurement of fractional flow reserve or brachytherapy) were present.

Conclusion: Didactic education and real time feedback to physicians during intervention protocols reduced average fluoroscopic exposure times and the number of patients exposed to prolonged irradiation by approximately one-third. Equally significant is the simple program could significantly reduce the dangers of radiation exposure during interventional cardiology procedures.

Conclusion: After control for common variables, cTnl elevation following PCI does not have a significant predictor of death (χ² 2.7, p=0.10), death and MI (χ² 1.9, p=0.17), or death, MI, and TVR (χ² 0.0, p=0.96) at three years. Despite similarities in ACS management guidelines, this study revealed disparities in use of thrombolytic agents and PCI between EE sites and RW in a large multinational clinical trial. Given the higher rates of adjusted mortality and myocardial infarction among EE patients, these findings indicate the need for studies to address the sources of treatment and outcome variation, and strategies for improving access to effective cardiovascular therapies in EE.

Poster Session 1193 Outcomes of Acute Coronary Syndromes

Tuesday, April 01, 2003, Noon-2:00 p.m.
McCormick Place, Hall A
Presentation Hour: Noon-1:00 p.m.

1193-51 Treatment and Outcomes of Eastern European Patients With Acute Coronary Syndromes in a Multinational Randomized Clinical Trial
Oksa S. Gurina, Gena Bukhtain, Sabina Murphy, Christopher P. Cannon, the OPUS-TIMI 16 Investigators, Ukrainian Institute of Cardiology, Kiev, Ukraine, Brigham and Women's Hospital, Boston, MA

Background: Registries and clinical trials have offered limited evidence on the translation of non-ST segment elevation acute coronary syndrome (ACS) trial findings into local practices in Eastern Europe (EE). We examined differences in ACS treatment and outcomes between EE and other regions in OPUS-TIMI-16, a randomized trial of prolonged oral glycoprotein IIb/IIIa inhibition.

Methods: The OPUS-TIMI 16 trial included 10,268 ACS patients at 70 sites in 25 countries. Of these patients, 1248 (12.1%) came from 62 sites in the EE countries of the Czech Republic, Hungary, Poland, and Russia. Patients received adjunct treatments at physician discretion. We compared variation in baseline characteristics, treatment, and outcomes of patients in EE and other regions of the world (RW).

Results: We found that EE patients in OPUS-TIMI 16 had more high-risk features at presentation. We identified significant variation between EE and other regions in use of adjunct therapies during hospitalization. While only 22.5% of EE patients received thrombolytics versus 39.9% of patients in RW (p<0.001), we observed more extensive use of angiotensin converting enzyme inhibitors (9.1% versus 4.7% (p<0.001)), beta-blockers (6.3% versus 4.82 (p<0.001)), calcium-channel blockers (6.2% versus 3.92 (p<0.001)), and nitrates (64.9 versus 28.9 (p<0.001)) in EE. EE patients also underwent fewer concomitant coronary interventions (PCI) 11.86% versus 29.93% (p<0.001). Patients in EE had worse outcomes at 30 days. After adjustment for baseline characteristics and revascularization rates, EE patients had higher rates of death (hazard ratio (HR) 1.62 (p<0.001)) and myocardial infarction (HR 1.84 (p<0.001)). These trends persisted at 10 months.

Conclusion: Despite similarities in ACS management guidelines, this study revealed disparities in use of thrombolytic agents and PCI between EE sites and RW in a large multinational clinical trial. Given the higher rates of adjusted mortality and myocardial infarction among EE patients, these findings indicate the need for studies to address the sources of treatment and outcome variation, and strategies for improving access to effective cardiovascular therapies in EE.

1193-52 Troponin I Elevation Following Percutaneous Coronary Intervention Does Not Predict Future Adverse Outcomes
J. William Price, Haoz Samady, Linda Snyder, Howard M. Christenson, Jennifer Gibson, David E. Burns, Sharon Sayeg, Lawrence W. Gimpel, Michael Augista, Eric R. Powers, Ian J. Sarembock, University of Virginia, Charlottesville, VA

Background: The importance of troponin I (cTnl) elevation following percutaneous coronary interventions (PCI) has not been evaluated as extensively as CK-MB. This study evaluated the prognostic significance of cTnl elevation following PCI on MACE (death, MI, TVR) at three years.

Methods: We prospectively studied 320 consecutive patients without acute MI who underwent successful PCI (mean age 62 +/- 12, males 64%, diabetes 32%, prior MI 43%, CHF 12%, stent use 76%). All patients had blood drawn before and 12-24 hours after PCI for cTnl assay on a Dimension ™ BRL. Serial follow-up by phone and questionnaire occurred at six months, one, two and three years.

Results: Periprocedural cTnl elevation occurred in 192/320 (60%) patients using cTnl > 0.1 ng/mL. The rate of death from cardiovascular causes was 4.9% in the beta-carotene arm and 9.9% in the control arm.

Conclusion: Despite similarities in ACS management guidelines, this study revealed disparities in use of thrombolytic agents and PCI between EE sites and RW in a large multinational clinical trial. Given the higher rates of adjusted mortality and myocardial infarction among EE patients, these findings indicate the need for studies to address the sources of treatment and outcome variation, and strategies for improving access to effective cardiovascular therapies in EE.