

## Chronic CAD/Stable Ischemic Heart Disease

## **PROGNOSTIC ROLE OF TROPONIN I ELEVATION AFTER ELECTIVE PCI**

Moderated Poster Contributions Poster Sessions, Expo North Sunday, March 10, 2013, 3:45 p.m.-4:30 p.m.

Session Title: Stable Ischemic Heart Disease: Risk Predictors and Biomarkers Abstract Category: 9. Chronic CAD/Stable Ischemic Heart Disease: Basic Presentation Number: 1239M-59

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Background: The prognostic role of minor troponin elevation after PCI is controversial.

Objective: to assess the prognostic role of troponin I (TnI) elevation after elective PCI and its relation with patients' age.

**Methods:** and population: The study included 1532 patients (pts) who underwent elective PCI because of anginal symptoms or inducible myocardial ischemia. In all patients TnI levels were measured every 6 hours after PCI. The TnI levels  $\geq$  1.0 ng/ml after PCI were considered indicative of myocardial damage. Follow-up data were obtained for 1432/1532 (93.4%) pts. The events taken into account in the follow-up were: total mortality, cardiac death, hospitalization for acute myocardial infarction and/or unstable angina.

**Results:** All pts were clinically stable. The following variables were predictive of MACE by univariate analysis: age  $\geq$ 75 years (p=0.012), ejection fraction <50% (p=0.001), prior myocardial infarction (p=0.031) and Tnl  $\geq$ 1.0 ng/ml after PCI (p=0.04). In the global population multivariate analysis identified ejection fraction as the unique predictor of events (OR 0.97, 95% Cl 0.95-0.99; p=0.012) . A subanalysis was then performed to investigate the role of Tnl elevation in relation to patients' age (<75/ $\geq$ 75 yrs) and ejection fraction (<50/ $\geq$ 50%). In pts with EF  $\geq$ 50% (n=617) the incidence of total mortality, cardiac death, acute MI and MACE were significantly higher in the subgroup of pts  $\geq$ 75 yrs with Tnl  $\geq$  1.0 ng/ml. In this cohort of pts with EF  $\geq$  50% the multivariate analysis confirmed the Tnl elevation  $\geq$ 1.0 after PCI and the older age  $\geq$ 75 yrs as predictive of MACE (Tnl: OR 2.33, 95% Cl 1.01-5.37, p=0.04; Age: OR 1.04, 95% Cl 1.01-1.08, p= 0.04).

**Conclusions:** This study documented that in pts with preserved EF, regardless of age, minor Tnl elevation is an independent predictor of major cardiac events in follow-up.