

IMPACT OF MULTIVESSEL DISEASE WITH AND WITHOUT A CONCURRENT CHRONIC TOTAL OCCLUSION ON SHORT AND LONG-TERM MORTALITY IN ST-ELEVATION MYOCARDIAL INFARCTION PATIENTS WITH AND WITHOUT CARDIOGENIC SHOCK

i2 Oral Contributions

Ernest N. Morial Convention Center, Room 345

Sunday, April 03, 2011, 8:14 a.m.-8:28 a.m.

Session Title: CTO

Abstract Category: 11. PCI - Chronic Total Occlusions

Presentation Number: 2902-6

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Background: Recently, the impact of a chronic total occlusion (CTO) in a non infarct related coronary artery (IRA) was shown to be a strong predictor for early and late mortality after primary PCI for STEMI. In the present analysis we evaluated the impact of MVD with or without a CTO on early and late mortality in STEMI patients with and without CS.

Methods: Between 1999 and 2005, 3277 STEMI patients were treated with primary PCI. Patients were stratified according to the presence of CS on presentation and categorized according to the extent of coronary artery disease (SVD, n=1970; MVD without CTO n=655 and MVD with a CTO in a non-IRA n=329).

Results: Figure 1 shows mortality rates at 30 days and from 30 days to 5 years in patients with, n=323 (1a) and without CS, n=2854 (1b). In STEMI patients with CS, MVD without a CTO (HR 1.80, P=0.01), and MVD with a CTO (HR 2.50, P<0.01) were both independent predictors for 30 day mortality. In 30-day survivors, MVD without CTO lost its predictive value whereas MVD with a CTO remained a predictor (HR 3.55, P=0.01). In patients without CS, only MVD with a CTO was a strong and independent predictor for 30 day mortality (HR 3.82, P<0.01) and thereafter (HR 1.71, P<0.01), whereas MVD without a CTO had no influence on early or late mortality.

Conclusions: MVD with a CTO in a non-IRA is an independent predictor of early and late mortality in STEMI patients with and without CS. In contrast, MVD without a CTO is only an independent predictor of early mortality in CS patients.

