SUBCLINICAL ELEVATION OF HIGH SENSITIVE TROPONIN T LEVELS AT THE CONVALESCENT STAGE IS PREDICTIVE FOR 5-YEAR MORTALITY AFTER ST-ELEVATION MYOCARDIAL INFARCTION

Oral Contributions
Room 147 B
Monday, March 31, 2014, 10:45 a.m.-11:00 a.m.

Session Title: Young Investigator Awards Competition: Cardiovascular Health Outcomes and Population Genetics
Abstract Category: Cardiovascular Health Outcomes and Population Genetics
Presentation Number: 931-05

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Background: We sought to investigate the long-term prognostic impact of serum high-sensitive troponin T (hs-TnT) levels at convalescent stage of ST-elevation myocardial infarction (STEMI).

Methods: Consecutive 2,957 patients 7-62 days after the onset of STEMI registered to the Osaka Acute Coronary Insufficiency Study between 2000 and 2009 were divided into 4 groups according to the results of the survival classification and regression tree (CART) analysis (median 65 y.o., 79% male). We further evaluated whether this classification of hs-TnT levels might improve predictive accuracy for 5-year mortality by assessing integrated discrimination improvement (IDI).

Results: Median hs-TnT level was 0.025ng/m (quartile 0.011-0.084). During the median follow up of 1,782 days, 190 died. The survival CART analysis revealed the 1st, 2nd, and 3rd discriminating hs-TnT levels to discern the 5-year mortality as 0.028, 0.008, and 1.340ng/mL, respectively, suggesting that even subclinical values at the convalescent stage (>0.009ng/mL) were associated with increased 5-year mortality (Figure).

Importantly, the IDI analysis revealed that incorporation of this hs-TnT classification to other clinical variables significantly improve predictive accuracy for 5-year mortality (IDI = 0.007, p=0.020).

Conclusions: Subclinical elevation of hs-TnT levels at the convalescent stage of STEMI (>0.009ng/mL) was predictive for 5-year mortality.