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Acute Coronary Syndromes

MID-REGIONAL PROADRENOMEDULLIN PREDICTS LONG-TERM MORTALITY IN PATIENTS WITH CHEST PAIN

Poster Contributions
Hall C
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Background: Adrenomedullin (ADM) is a vasodilatory peptide that has not been evaluated in large populations of patients presenting with chest pain.

Methods: The CHOPIN trial (Copeptin Helps in the early detection Of Patients with acute myocardial Infarction) was a 16-center trial which enrolled 2071 patients who presented to an ED within 6 hours of pain onset. In this post-hoc exploratory analysis we assessed the association of MR-proADM with all-cause mortality. Troponin assay utilized is cTnI Ultra assay on an ADVIA Centaur XP system (Siemens).

Results: We measured MR-proADM in 2024 subjects, of which 36 subjects (1.8%) died either during or within 6 months of hospitalization. MR-proADM levels on admission were higher in those who died (1.56 nmol/L [0.95-2.7] vs. 0.61 nmol/L [0.459-0.842], p<0.001). The C-statistics for all-cause mortality were: MR-proADM 0.845, MR-proANP 0.819, and Troponin 0.794. In univariate logistic regression analysis the HR (95% CI) for death were: Log10 MR-proADM [HR 55.9 (95% CI 7.9-381.3)]; log10 troponin [HR 2.0, (95% CI 1.3-3.1)], and log10 MR-proANP,[HR=1.1 (95% CI 0.3-3.9)]. Kaplan Meyer figure demonstrates MRproADM levels above 0.858 nmol/L (highest quartile) in patients contains 27 of the 36 deaths.

Conclusions: In undifferentiated patients presenting with chest pain, MR-proADM is more strongly associated with all-cause mortality compared to troponin and MR-proANP.