diagnosis rate was significantly higher as determined by IMA compared to cTnI assay within 1 h (82% vs 41%, p<0.01). **Conclusions** We support the notion that IMA may be a useful biochemical marker for the early diagnosis of acute myocardial ischaemia, particularly for patients with acute chest pain presenting to the ER.

[gw22-e0546]

ASSESSMENT OF ISCHAEMIA MODIFIED ALBUMIN LEVELS FOR EARLY DIAGNOSIS OF ACUTE MYOCARDIAL ISCHAEMIA IN EMERGENCY ROOM

Shen Xiao-li, Lin Cai-jing, Han Li-li, Lin Lin, Pan Leng, Pu Xiao-dong Fujian Provincial Key Laboratory of Cardiovascular Disease, Fujian Provincial Hospital, Fujian Medical University, Fujian, China

10.1136/heartjnl-2011-300867.427

Background The aim of this study was to retrospectively evaluate assessment of ischaemia-modified albumin (IMA) levels for early diagnosis of acute myocardial ischaemia particularly for patients admitted in emergency room.

Methods The following patients were studied: 492 with acute coronary syndrome (ACS) including 133 with acute chest pain as presented to the emergency room (ER), 74 with high blood pressure and 78 with viral myocarditis (VMC). Eight hundred and thirty healthy controls were studied. Blood samples were obtained shortly after presentation and at various times thereafter. IMA and cardiac troponin I (cTnI) levels were measured, and ECGs obtained.

Results IMA concentrations were significantly higher in the ACS (0.55 ± 0.11 ABSU) and VMC groups (0.38 ± 0.11) compared to the control group (0.34 ± 0.08 ABDU, p<0.05). There was a significant difference between the ACS and VMC groups (p<0.05). Of the patients diagnosed with ACS following presentation at the emergency room with chest pain, the correct