

[gw22-e0548]

CHANGES OF MYELOPEROXIDASE (MPO) AND ISCHAEMIA MODIFIED ALBUMIN IN PATIENTS WITH CORONARY HEART DISEASE

Lili Han, Xiaoli Shen, Leng Pan, Saimei Lin, Xiaoqing Liu, Lifang Lin, Xiaodong Pu
Fujian Provincial Key Laboratory of Cardiovascular Disease, Fujian Provincial Hospital, Fujian Medical University, Fujian, China

10.1136/heartjnl-2011-300867.409

Introduction Myeloperoxidase (MPO) is an oxidant-generating enzyme expressed in neutrophils and macrophages and involved in the atherosclerosis. Ischaemia modified albumin (IMA) has been demonstrated to be a biomarker of ischaemia associated with myocardial ischaemia. We investigate the changes of MPO and IMA in patients with coronary heart disease.

Methods We performed a case-control study. One hundred and fifty seven individuals who had angiographically proved atherosclerotic plaques in their coronary arteries (with $\geq 50\%$ stenosis in at least one coronary vessels) were defined as the case group. Seventy eight individuals without any stenosis in all coronary vessels were defined as controls. Total plasma MPO levels were measured by ELISA, hs-CRP by immunoturbidimetry and IMA was assayed by the albumin cobalt binding test.

Result Mean total plasma MPO level was significantly higher in CHD patients than that in controls (332.05 ± 167.56 pg/ml vs 277.81 ± 142.68 pg/ml, $p < 0.05$). Compared with the controls, IMA and hs-CRP level in CHD patients were much higher ($p < 0.05$ and $p < 0.01$). Plasma level of MPO was not correlated with IMA and hs-CRP level.

Conclusions MPO, IMA and hs-CRP all play a role in coronary heart disease, MPO is a inflammation biomarker independent of IMA and hs-CRP.