Chlamydia Pneumoniae Infection and Eight-Year Outcome in 895 Patients Undergoing Coronary Angiography

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Background: The role of Chlamydia pneumoniae in the development of coronary artery disease remains uncertain, while pathological studies suggest high levels of antigens in atheroembolic vessels. Epidemiological evidence is less convincing. This study examines the relation between C pneumoniae infection determined by IgG and IgA levels and the severity of coronary artery disease in patients undergoing coronary angiography, and subsequent all cause mortality in an eight year follow-up period.

Methods: Blood samples from 895 patients who underwent coronary angiography in 1992 were analysed for IgG and IgA antibodies to C pneumoniae, and tested for C pneumoniae DNA using polymerase chain reaction (PCR). Follow-up mortality statistics were provided by the General Register Office for Scotland and included analysis of death certificat-

Results: The risk of angiographic coronary artery disease was higher in patients with an IgG titre $\geq$ 1:128 (odds ratio 1.62, 95% CI 1.19-2.25), and IgA titre $\geq$ 1:64 (odds ratio 2.30, 95% CI 1.54-3.42). There was no significant difference in IgG or IgA titres between the patients with stable angina and those presenting with unstable angina. The antibody response did not predict all cause mortality or cardiovascular outcome after 8 years of follow up. C pneumoniae DNA was not directly detected in any patient using PCR despite using a variety of primers.

Conclusions: Antibody responses to C pneumoniae are common and do not indicate an adverse prognosis. Although there was an association with angiologically demonstrated coronary disease, this did not translate into an effect on all-cause or cardiovascular mortality.

Poster Session

Clinical Insights on Myocardial Ischemia

Monday, March 31, 2003, 3:00 p.m.-5:00 p.m.
McCormick Place, Hall A
Presentation Hour: 3:00 p.m.-4:00 p.m.

Recurrence of ST Elevation After Early Reperfusion as a Marker of Prognosis in ST Elevation Infarction

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Background: Continuous ST-monitoring can non-invasively quantify not only rapidity and extent, but also stability in restoration of myocardial perfusion during ST-elevation infarction (STEMI). We examined whether signs of recollusion reversed prognostic gain won by early reperfusion and added information. Methods: In a meta-analysis of 1110 patients with STEMI, the cut-offs for time to resolution of ST-elevation were determined by the reperfusion group (TIMI 1-2) and the non-reperfusion group (TIMI 0). Results: A peak oxygen consumption (VO2) below 14 ml/kg/min in patients being assessed for cardiac transplantation, does not confer a severe reduction in cardiac pump performance. A similar disparate relationship has been reported for patients with ischaemic heart disease and we tested the hypothesis that this could be normalized with revascularisation. We performed cardiorespiratory exercise tests with haemodynamic measurements, one month before and three months after successful CABG in 67 consecutive patients. We divided the patients according to whether their pre-operative peak VO2 was above or below 14. 19 patients had a pre-operative peak VO2 $< 14$. Following CABG the correlation coefficient for this group between peak VO2 and peak cardiac output (CO) increased from $r = 0.5$ (p $< 0.05$) to $r = 0.79$ (p $< 0.005$). The regression equation changed from VO2 = 0.42CO + 8.5, to VO2 = 1.24CO + 3.6, a significant change when assessed using linear regression analysis ($p < 0.05$). The regression equation changed from VO2 = 0.5 (p $= NS$) to $r = 0.79$ (p $< 0.005$). The regression equation changed from VO2 = 0.5 (p $= NS$) to $r = 0.79$ (p $< 0.005$). The regression equation changed from VO2 = 0.5 (p $= NS$) to $r = 0.79$ (p $< 0.005$). The regression equation changed from VO2 = 0.5 (p $= NS$) to $r = 0.79$ (p $< 0.005$).