

A serological investigation of *Chlamydia pneumoniae* infection in coronary heart disease

Of the candidate infectious agents implicated in the pathogenesis of coronary heart disease (CHD), *Chlamydia pneumoniae* has emerged as the most likely pathogen to have a causal role. We have investigated the association between IgG antibody titres to *Chlamydia pneumoniae* in Chronic CHD patients and Acute Myocardial Infarction (AMI) patients.

Patients comprised of 41 individuals with Acute Myocardial (AMI) (age range 35 to 74 years) and 30 patients with Chronic CHD (age range 36 to 68 years) from the Teaching Hospital Peradeniya. Thirty healthy controls were matched for age and sex and were recruited from an on-going population study from the same geographic area. Antibodies to *Chlamydia pneumoniae* were detected using MRL Diagnostics (USA) *Chlamydia Micro* - immunofluorescent assay (MIF) utilizing *C. pneumoniae* TW 183, Product code IF 1200G.

There was no significant difference in the number of patients and controls with IgG titres of 1/32, 1/64, 1/128 and 1/512 in the AMI group or in the Chronic CHD group when compared with the controls. IgG titre was positive at 1/32 in 58.5% AMI patients and in 56.6 % of control subjects (odds ratio 1.08, $p=0.93$). IgG titre was positive at 1/32 in 73.3 % of CCHD patients and in 56.6% of control subjects (odds ratio 2.1, $p=0.27$). The Geometric means of the IgG titres were CCHD = 189.1, AMI = 173.3 and control group = 131.8 ($p<0.05$). In this study IgG antibodies to *Chlamydia pneumoniae* detected by microimmunofluorescence did not show a significant association with coronary heart disease.