SEROLOGICAL MARKERS OF *CHLAMYDIA PNEUMONIAE*, CYTOMEGALOVIRUS AND *HELICOBACTER PYLORI* INFECTION IN DIABETIC AND NON-DIABETIC PATIENTS WITH UNSTABLE ANGINA PECTORIS

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SUMMARY

The possible role of inflammation in coronary artery disease (CAD) is being recognised, while markers of inflammation (e.g., CRP) and infection with *Chlamydia pneumoniae* (*C. pneumoniae*), cytomegalovirus (CMV) and *Helicobacter pylori* (*H. pylori*) have been proposed as risk factors for CAD. However, these associations require further evaluation. It is a known fact that diabetic patients suffer from impaired immune response to some pathogens and a high incidence of atherosclerosis.

In this case-control study we investigated serological markers of infection with *C. pneumoniae*, CMV, and *H. pylori* in a group of 140 patients with unstable angina pectoris (UA), 52 of them having type 2 diabetes mellitus, and in a matched control group. Anamnestic (IgG) and acute infection (IgA) antibodies against the above agents were tested using ELISA or indirect immunofluorescence tests.

In patients with UA we found a significantly higher seroprevalence and titres of IgG antibodies against *C. pneumoniae* ($p=0.04$) and increased titres of IgG antibodies against CMV ($p=0.007$). No differences were found in IgA antibody response to these pathogens.

Antibody response to *H. pylori* was similar in both groups tested. In diabetic patients with UA, the frequency of group-common IgG antibodies against *C. pneumoniae* was higher than in the non-diabetic UA patients. The other serological markers studied were comparable in the patients with or without diabetes mellitus.

Our findings confirmed association of *C. pneumoniae* and CMV with cardiovascular heart disease. Moreover, diabetes mellitus may predispose the patients to *C. pneumoniae* infection. However, serological markers observed do not indicate that destabilisation of angina pectoris is associated with acute *C. pneumoniae* or CMV infection. No relationship was found between UA and *H. pylori* infection.

Key words: infection, coronary artery disease, unstable angina, diabetes mellitus

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