Serological investigation of Chlamydia pneumonia in Patients with Coronary Artery Disease

Abstract

Background and objectives: Coronary Artery Disease is one of the most important causes of death in the world. Atherosclerosis is a complex disorder and many factors cause it. In recent years, a relationship between infectious agents, particularly Chlamydia pneumonia, and atherosclerosis was found. This research was aimed at serological studying of Chlamydia pneumonia in the coronary artery patients and healthy ones.

Material and Methods: We carried out this cross-Sectional study on 102 patients with CAD and 142 individuals without any history of CAD. The subjects were admitted to Dr. Beheshty hospital, Babol, from July 2005 to September 2006. The subjects' serums were collected to detect specific anti Chlamydia pneumonia antibodies (IgA and IgG), using ELISA method. Data were analyzed by chi-square, using SPSS software.

Results: The mean age of patients and healthy subjects were 60.6 and 43.7 years, respectively. Fifty-nine point eight percent of cases and 40.8% of healthy subjects are men. The results show that 45.1% of patients and 47.9% of healthy subjects have positive titer of IgG and negative titer of IgA (chronic). There is no significant correlation between patient and healthy groups (P=0.698). Also 88.2% of patients and 81% of healthy group have positive titer of anti Chlamydia pneumonia antibody (IgG).

Conclusion: In spite of high titer of IgG, there is no significant relationship between Chlamydia pneumonia and atherosclerosis. It seems that further experiments are necessary to prove the relationship between Chlamydia and atherosclerosis.

Key words: Atherosclerosis, Chlamydia pneumonia, IgA, IgG