

Serological investigation of Chlamydia pneumonia in Patients with Coronary Artery Disease

Shahandeh, Z (Ms)

Instructor of laboratory sciences department,
Babol university of Medical Sciences, Iran

Sedighian, F (BSc)

Laboratory sciences department, Babol
University of Medical Sciences, Iran

Salehi Omran, M.T. (PhD)

Associate Professor of Cardiology
Department, Babol University of
Medical Sciences

Saberian, F (BSc)

Nurse Babol
Shahid Beheshti hospital

Corresponding Author: .Shahandeh, Z

E.mail: Shahandeh-ZA@yahoo.com

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. Beheshti 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