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***Cytomegalovirus* infection and coronary artery disease: A single center serologic study in north-western Iran**

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**Background:** The role of chronic *cytomegalovirus* (CMV) infection and inflammation in the pathogenesis of atherosclerosis and coronary artery disease (CAD) is still not clear. In this study the aim is to investigate the seroprevalence of anti-CMV antibodies and inflammatory markers in patients who were undergone diagnostic coronary angiography for clinical suspicion of CAD.

**Methods:** In this cross-sectional descriptive study, 181 patients were selected randomly among those who were referred for diagnostic coronary angiography to the Seyyedoshohada Heart Hospital of Urmia, in the north-western region of Iran (Aug 2012- Dec 2013). Patients were categorized into either of CAD or non-CAD groups, based on their angiography findings. Anti-CMV IgG and IgM antibodies were tested using the enzyme-linked immunosorbent assay (ELISA) method. Serum C-reactive protein (CRP) was measured by a qualitative method (Aniston Kit).

**Results:** A hundred and forty one patients (77.9%) had atheromatous plaques in their coronary arteries in angiography, and in 40 cases (22.1%), coronary arteries were free of any plaque. Based on the ELISA results, 171 (99.4%), 21 (12.0%), and 112 (62.9%) cases were respectively seropositive for anti-CMV IgG, IgM, and CRP. 99.3% in the CAD group and 100% in the non-CAD group were anti-CMV IgG positive. The rates for anti-CMV IgM seropositivity were 11.7% in CAD group versus 13.2% in non-CAD group,  $p=0.78$ . Groups with and without angiographically-documented CAD, had no significant difference in terms of their CRP seropositivity (64.7% vs. 56.4%,  $p=0.34$ ).

**Conclusion:** Regardless of having angiographically-proven CAD or not, almost all cases who referred for coronary angiography in our study, had a previous exposure with CMV infection as determined by the presence of anti-CMV IgG antibodies in serum. No association was observed between CMV infection and the presence of CAD, which could be justified with the high rate of CMV-specific IgG antibody seropositivity.

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