

ORAL ABSTRACTS

Neovascular age-related macular degeneration and Chlamydia pneumoniae antibodies in Asian patients: A pilot case-control study

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Purpose: To investigate the relationship between neovascular age-related macular degeneration (AMD) and *Chlamydia pneumoniae* (*C. pneumoniae*) antibodies in Asian patients.

Background: AMD shares several risk factors with atherosclerosis and coronary heart disease. Infection with *C. pneumoniae*, a prokaryotic pathogen that causes chronic inflammation, has been shown in Caucasian populations to be a risk factor for cardiovascular diseases and AMD. To our knowledge, no similar study has been reported in an Asian population.

Methods: This is a prospective age- and sex-matched case-control study of Asian patients. The demographic details, systemic medical history, serum lipid and serum *C. pneumoniae* antibodies (IgA and IgG) profiles were analyzed.

Results: Twenty-eight consecutive neovascular AMD cases were age- and sex-matched to 28 controls. There were 22 males and 6 females in each group with a mean age of 69.6 (range, 53-89) and 70.1 years (range, 56-89) among cases and controls respectively. There were no statistically significant differences in IgA and IgG levels as well as the mean optical density of IgA between the 2 groups. However, the mean IgG optical density was significantly higher in cases than in controls ($P=0.002$). There was no significant association between IgA or IgG antibody levels and smoking status, history of diabetes mellitus and coronary heart disease and lipid profile, which included total cholesterol, triglycerides, high density lipoproteins and low density lipoproteins among the cases and controls.

Conclusion: Asian patients with neovascular AMD have higher mean IgG titers than age- and sex-matched controls. The lack of association between neovascular AMD or Chlamydia seroprevalence with other known risk factors may be related to the small sample size.

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