

Determine the response of *Mycoplasma pneumoniae* in patients with atypical pneumonia

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Background and Aim:

Approximately twenty percent of acute pneumonia due to *Mycoplasma pneumoniae* is an atypical manifestation. According to the characteristics of bacteria and antibiotic resistance, the treatment is usually difficult and time consuming; however in most cases the correct diagnosis of mycoplasma infections is not available. Considering that the rate of positive reactions to these bacteria in recent studies was not clear, conducting such a study seemed to be necessary.

Methods:

This study is a cross-sectional study, to determine the antibody titer in patients with atypical pneumonia in 104 patients referred to some hospitals in Tehran. Blood and serum samples were obtained, questionnaires completed by individuals then the antibody was tested with ELISA. Data were analyzed by Regression methods and ANOVA.

Results:

Among the 104 suspicious patients, (75 patients (1.72%) were female and 29 patients (9.27) were male with age average of 32.5 years) the IgG antibody titer against *Mycoplasma pneumoniae* in 60 patients (6.57%) was positive, in 38 (5.36%) was negative and in 6 patients (76.5%) was intermediate.

Conclusions:

Currently the fastest and easiest method for detecting mycoplasma antibody is ELISA, which has a high sensitivity and specificity. According to the obtained information, the high antibody levels in the studied population are indicative of high rate of infection with *Mycoplasma pneumoniae*.

Keywords: *Mycoplasma pneumoniae*, ELISA, Atypical pneumonia