

R402

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***Mycoplasma pneumoniae* as an aetiological agent in childhood community-acquired pneumonia**

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One of the greatest challenges in dealing with childhood pneumonia is etiology identification.

Mycoplasma pneumoniae is one of the main etiological agents of community-acquired pneumonia in children.

Objectives: The aim of the study was to determine the prevalence of *M.pneumoniae* respiratory infection in children during the period 2001-2012. Also, the distribution based on age and season of *M.pneumoniae* respiratory infection was estimated.

Material and Methods: A total of 870 children (454 boys, 416 girls, aged 1,5 months to 14 years old) hospitalized for lower respiratory tract infection between 2001-2012 were investigated for the presence of *M.pneumoniae* infection. Serum samples were collected from all children and tested for specific IgM and IgG antibodies against *M.pneumoniae*. From the patients, 504 were children aged <5 years old, 258 children 5-10 years old and 108 >10 years old. One serum sample was collected from 515 children, while a second serum sample was tested in 355 children for seroconversion or a fourfold titre increase. Specific IgM and IgG antibodies identification was performed by ELISA (Serion, Wurzburg, Germany). The diagnosis of *M.pneumoniae* infection was based on positive titers of IgM or/and IgG specific antibodies.

Results: In 870 patients total, *M.pneumoniae* respiratory infection (IgM or/and IgG antibodies) was confirmed in 196 children (84 boys, 112 girls) (range 22,5%). *M.pneumoniae* infection (seroconversion) was found in 28,4% out of 355 children with two serum samples and in 18,4% out of 515 children with one serum sample. The infection was most frequently identified in children aged 5-10 years old, but the prevalence was also high in the age group of children under 5 years old. Additionally, the infection was observed much more frequently in the spring and summer months (129 cases). Epidemic increases were notified in 2003 (34 cases) and in 2010 (31 cases).

Conclusion: *M.pneumoniae* is a common cause of respiratory infection in children, especially in those aged less than 10 years old. Epidemic increases are observed. Increased prevalence of the disease occurs during the spring and summer months.