

CLINICAL MEANING OF SPECIFIC IgA IN *Mycoplasma pneumoniae* INFECTION

Ciarrocchi G.¹, d'Anzeo M.¹, Farnocchia E.¹, Rondello G.¹ Cimarelli M.E.²

¹SO Laboratorio analisi, Sierologia, AO Ospedali Riuniti Policlinico-Ancona;

²SO Broncopneumologia, AO Ospedale Civile-Jesi

Mycoplasma pneumoniae is the major causative agent of community-acquired pneumonia (CAP), mainly in children, but with reported cases in adults too. The diagnosis is mainly based on serological findings.

In this study, 37 selected sera were from pediatric and adult patients with CAP evidence, positive for specific IgM and/or IgA, and 102 sera were from patients with suspected lower respiratory tract infections. Specific IgA, IgG, IgM were determined by an ELISA test with a coating of enriched protein P1 (Savyon, Israel) and a similar rapid automated test (Chorus Mycoplasma IgG, IgM and IgA - DIESSE Diagnostica Senese SpA, Italy). This latter test detected 27/102 IgA positive sera, the correlation between the Savyon and Chorus Mycoplasma IgA kits was 93%. Of the 37 CAP sera, 24 were unanimously positive for IgA and IgM, 6 sera from adult patients were IgA positive and IgM negative, the correlation between Savyon and Chorus tests was 96%. In both patients groups, IgA were associated mainly with IgM in children and young people, vice versa, in adults the prevalent association was IgA plus IgG, with weak or absent production of IgM; in some elderly patients, high levels of IgA were found as only marker of infection.

In conclusion the determination of specific IgA, in addition to IgM and IgG, outlines a complete pattern of relevant serological diagnostic significance, which varies over age classes and different clinical pictures.