

DOI: 10.5152/TurkThoracJ.2019.249

[Abstract:0574] OP-118 [Accepted: Oral Presentation] [Pediatric Lung Diseases]

## Cold Agglutination Test and *Mycoplasma pneumoniae* (A Retrospective Study)

Abdullah Akkuş<sup>1</sup>, Sevgi Pekcan<sup>1</sup>, Gökhan Gözün<sup>1</sup>, Özge Metin Akcan<sup>1</sup>, Mehmet Özdemir<sup>2</sup>, Ensar Karakaş<sup>1</sup>, Fatma Arzu Akkuş<sup>3</sup>

<sup>1</sup>Department of Pediatrics, Necmettin Erbakan University Meram School of Medicine, Konya, Turkey

<sup>2</sup>Department of Microbiology, Necmettin Erbakan University Meram School of Medicine, Konya, Turkey

**Objectives:** The most common cause of community-acquired atypical pneumonia is *Mycoplasma pneumoniae*. Cold agglutination test may be used for diagnosis in acute stage. The highest dilution causing agglutination at +4°C is accepted as the cold agglutination titer.

**Methods:** 117 children with *Mycoplasma pneumoniae* with a positive cold agglutination test, who were hospitalized in our clinic between January 2014 and January 2019, were evaluated retrospectively.

**Results:** Of 117 cases; 54 (46.1%) were male and 63 (53.9%) were female, with a mean age of 6.1±11 years (min 2 months-max 17 years). Of our cases; 51 (43.5%) were under 5 years of age (12 patients under 12 months of age, 8 at 1 year of age, 10 at 2 years of age, 8 at 3 years of age and 13 at 4 years of age), 62 (52.9%) at between 5 and 15 years of age and 4 over 15 years of age. Ratio of those admitted with cough was 20.5%. Ratio of those admitted with fever was 3.4%. Ratio of patients with symptoms of upper and lower respiratory tract infections (including fever, malaise, productive cough and dyspnea) was 39.3%. In our study, ratio of patients with respiratory findings (rales, rhonchi, tachypnea, retractions, reduced respiratory sounds) was 47.1%. Fever was present in 20 patients, with the lowest value being 38.2 C0 (17%). WBC count of the patients with highest WBC were over 13000/mm<sup>3</sup>, with a ratio of 47.1%. 56% of the patients had elevated CRP. The highest CRP value was 187 mg/L. In our study, ratio of patients with unilateral infiltration on chest x-ray was 17.2%, ratio of those with bilateral infiltrations was 60.6%. The most common clinical presentation of mycoplasma pneumoniae is pneumonia. Other clinical conditions may include pharyngitis, otitis media, bronchitis, sinusitis, croup and bronchiolitis. In our study, 3 had pharyngitis (2.5%), 3 had tonsillitis (2.5%), 1 had parotitis (0.83%), 1 had otitis media (0.83%) and 1 had sinusitis (0.83%).

**Conclusion:** *Mycoplasma pneumoniae* is generally among agents of pneumonia for patients over 5 years of age. The distribution of our group was high under 5 years of age as well. This may be caused by requesting laboratory tests in children in this age group whose clinical presentation is not consistent with neither bacterial nor viral pneumonia. With these findings, *Mycoplasma pneumoniae* should be remembered in each age group.

**Keywords:** Atypical pneumonia, cold agglutination test, *Mycoplasma pneumoniae*