

Mycoplasma pneumoniae infection in Danish children hospitalized during the 2010-2012 epidemic

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Conclusion

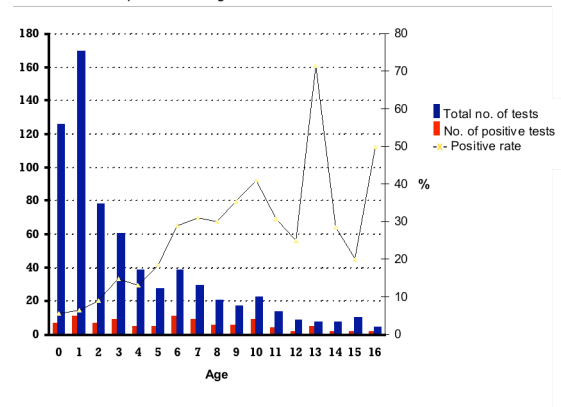
PCR from a nasal or throat swap is an easy, reliable and quick diagnostic test in infants and children. Awaiting PCR diagnosis before initiating antibiotic therapy may be regarded as safe considering the relatively benign nature of Mp infection.

Mycoplasma pneumoniae should be considered as a cause not only of community-acquired pneumonia, but also of milder respiratory infections in children less than 5 years old.

Introduction

Mycoplasma pneumoniae (Mp) is a common cause of community-acquired pneumonia. Pneumonia may be the most severe manifestation of respiratory Mp infection, while the most typical symptoms in children are cough and wheezing often accompanied by upper respiratory tract manifestations mimicking viral respiratory syndromes.

Positive rates dependent on age:



Mp-positive patients	0-1	2-5	6-10	>10	All
Age	0-1	2-5	6-10	>10	All
N (%)	18 (17.8)	25 (24.7)	41 (40.5)	17 (16.8)	101
Male (%)	50	56	39	70	51
Age, years, median [range]	1	3	8	13	6 [57 days; 16 years]
Weight, kg, median [range]	10.4 [5.1;12.4]	14.75 [11.2;21.2]	27.6 [15.5;46]	56.8 [35.9;71.4]	21.1 [5.1;67]
Chronic disease (%)	22.2	28.0	19.5	29.4	24.8
Symptoms > 7 days (%)	55.5	48.0	65.8	58.8	60
Fever > 38.0 °C (%)	44.4	36.0	41.5	47.0	45.5
Temperature °C, median [range]	38.0 [36.4;40.5]	37.75 [36.4;38.8]	37.9 [36.6;39.8]	38.2 [36.6;40.9]	37.9°C [36.4;40.9]
CRP, median (mg/l) [range]	12 [1;65]	21 [0.3;77]	15 [0.3;48]	32 [5;82]	16 [0.3;83]
Total leukocytes, median (10⁹/l) [range]	10.4 [4.7;21.9]	10.5 [4.2;18.9]	9.15 [4.9;19.9]	8.05 [4.7;11.6]	9.55 [4.2;21.9]
Admitted > 24 hours (%)	33.3	32.0	34.1	47.1	35.6
Oxygen-supplement (%)	16.7	12.0	17.1	5.9	13.8
CPAP/PEP (%)	5.5	16.0	14.6	5.9	13.8
Tube feeding/parenteral fluid (%)	11.1	12.0	0	0	5
Complications (%)	5.5	20.0	17.1	5.9	14.9
Co-infection (%)	16.6	16.0	7.3	0	8.9

Material and methods

This was a retrospective descriptive study. We included all children, hospitalized at the Department of Paediatrics University Hospital Hvidovre, Copenhagen, Denmark from the 1 August 2010 through May 2012 who tested positive for Mp by PCR. Clinical data were obtained from the medical charts.

Results

671 PCR analyses for Mp were performed of which 102 tested positive (15%). Our study included 101 Mp-positive children with a median age of 6 years (Range: 57 days – 16 years). The cases were distributed through out the year but with a peak from October to January. 43% were 5 years or younger, with 18% being 0-1 years old and almost 7% being less than one year old. Only 17% were 11-16 years old. 59% of the patients reported more than 7 days of fever and/or cough prior to admission. No neurological or other severe extra-pulmonary complications were seen in this population. 65 of 101 Mp positive children were discharged within 24 hours of admission.

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