

## ORIGINAL ARTICLE

# The Association of Immune and Liver Functions in Mycoplasma Pneumoniae Pneumonia Children with Andrographolide Sulfonate's Therapy

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### SUMMARY

**Background:** The aim of this study was to explore the association of immune and liver functions' alteration in mycoplasma pneumoniae pneumonia (MPP) children with the therapeutic effect of andrographolide sulfonate's curative outcome.

**Methods:** From January 2019 to April 2021, a group of 102 MPP child patients was divided into severe and mild cases in the light of the disease's severity, and involvement of 57 healthy child patients during the identical period was as the control. Comparison of immune function among three groups [immunoglobulin G (IgG), immunoglobulin A (IgA), immunoglobulin M (IgM)] and liver function indexes [Alanine aminotransferase (ALT), aspartate aminotransferase (AST),  $\gamma$ -glutamyl transferase (GGT)] was to analyze its association and assessment value for the illness's severity.

**Results:** IgA and IgM in MPP child patients were declined with the illness's severity, while ALT, AST and GGT were elevated with it ( $p < 0.05$ ). AUC of combined detection of immune and liver function indexes in assessing MPP's severity in children was augmented vs. each index's alone examination ( $p < 0.05$ ). IgA was negatively associated with MPP's severity in children, while ALT, AST, and GGT were positively associated with it ( $p < 0.05$ ). IgA in the effective was augmented vs. the noneffective, while ALT, AST, and GGT were declined vs. the noneffective ( $p < 0.05$ ).

**Conclusions:** The immune and liver functions of MPP child patients are associated with the illness's severity and provide an assessment value for the disease's severity and Andro-S's curative outcome. (Clin. Lab. 2023;69:xx-xx. DOI: 10.7754/Clin.Lab.2022.220605)

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**Supplementary Data****Table S1. The therapeutic effect of Andro-S in mild and severe groups.**

<b>Classification</b>	<b>Severe group (n = 41)</b>	<b>Mild group (n = 61)</b>	<b>P</b>
<b>Effective (n = 72)</b>	<b>21</b>	<b>51</b>	<b>0.001</b>
<b>Noneffective (n = 30)</b>	<b>20</b>	<b>10</b>	