

# Predictive index of plastic bronchitis in children with refractory Mycoplasma pneumonia

zhenli zhu<sup>1</sup> and yongsheng xu<sup>2</sup>

<sup>1</sup>Tianjin Medical University

<sup>2</sup>Tianjin Children's Hospital

March 30, 2022

## Abstract

**Abstract Objective** To explore the predictive indicators of plastic bronchitis (PB) in children with refractory Mycoplasma pneumoniae pneumonia (RMPP). **Methods** Retrospective analysis of children who were hospitalized in Tianjin Children's Hospital from December 2018 to January 2020 who met the RMPP diagnostic criteria and were treated with bronchoscopy and alveolar lavage. Collect and compare the clinical medical records of the two groups of children, and use Logistic regression analysis to find the predictive indicators for the occurrence of PB in children with RMPP. **Results** The incidence of hypoxemia in group II was higher, the days of fever was longer, hospital stay was longer, and radiological manifestations were more serious ( $P < 0.05$ ). The use rate of gamma globulin in group II was higher, and the hormone dose was higher ( $P < 0.05$ ). The levels of WBC, CRP, LDH, FER, D-D dimer, PLT, PCT, IL-6, AST and percentage of neutrophils in peripheral blood in group II were higher than those in group I ( $P < 0.05$ ). The percentage of lymphocytes in group II was lower than that in group I ( $P < 0.05$ ). The ROC curve and Logistic regression analysis showed that the days of fever, N%, CRP and LDH were independent risk factors for the occurrence of PB in children with RMPP. The cut-off values of days of fever, N%, CRP and LDH were 11.5 days, 68.4%, 45.5 mg/L and 559U/L respectively. **Conclusions** The days of fever, N% > 68.4%, CRP > 45.5 mg/L, LDH > 559U/L are predictors of PB in children with RMPP.

## Hosted file

submit.docx available at <https://authorea.com/users/470399/articles/562579-predictive-index-of-plastic-bronchitis-in-children-with-refractory-mycoplasma-pneumonia>