

Appendix 1

Questionnaire survey on knowledge of Mycoplasma pneumoniae pneumonia

[Question 1: What are the pathogenesis mechanisms of refractory MPP? [Multiple Choice]] ABCD

[MP resistance to macrolide antibiotics]

[Mixed infection]

[Abnormal immune function of the body]

[Underlying diseases in children]

[Question 2: Macrolide-unresponsive MPP refers to children who have undergone standard treatment with macrolide antibiotics but still have persistent fever, worsening clinical signs and pulmonary imaging after . [Single Choice]] B

[48 hours]

[72 hours]

[5 days]

[7 days]

[Question 3: Extra-pulmonary manifestations of MP infection include: [Multiple Choice]] ABCD

[Skin and mucosa]

[Nervous system]

[Hematologic system]

[Circulatory system]

[Question 4: Which of the following statement can confirm diagnosis of MPP: [Multiple Choice]] AC

[Colloidal gold method: Seroconversion of MP-IgM from negative to positive]

[MP-IgG: positive]

[MP nucleic acid test in deep sputum: positive]

[Particle agglutination method: MP-IgM 1:80]

[Question 5: Imaging manifestations of MPP include: [Multiple Choice]] ABCD

[Lobar/large consolidation]

[Patchy shadows]

[Pleural effusion]

[Interstitial pneumonia]

[Question 6: When should plastic bronchitis be considered? [Multiple Choice]] ABC

[Persistent high fever, wheezing, dyspnea or breathing difficulty]

[Three concave sign, subcutaneous emphysema, decreased or absent breath sounds]

[Imaging shows lobar or whole lung atelectasis or consolidation]

[Ineffective treatment with macrolide antibiotics]

[Question 7: Intrapulmonary complications of MPP include: [Multiple Choice]] ABCDE

[Plastic bronchitis]

[Pleural effusion]

[Lung necrosis]

[Pulmonary consolidation]

[Pulmonary embolism]

[Question 8: Indications for bronchoscopy in MPP: [Multiple Choice]] ABCDE

[Suspected mucus plugs and plastic bronchitis]

[Concurrent non-infectious causes like foreign body possible]

[Atelectasis, unilateral emphysema, consolidation]

[Poor efficacy after standard treatment]

[Airway obstruction symptoms]

[Question 9: Clinical manifestations of severe pneumonia include: [Multiple Choice]] ABCDE

[Persistent high fever ≥ 5 days or fever ≥ 7 days]

[Dyspnea, breathing difficulty]

[Extra-pulmonary complications]

[SpO₂ $\leq 93\%$ at rest breathing]

[Anorexia, impaired consciousness]

[Question 10: Imaging manifestations of severe pneumonia: [Multiple Choice]] ABCDE

[Single lobe $\geq 2/3$ consolidation]

[≥ 2 lobes with high density consolidation]

[Moderate to large pleural effusion]

[$>50\%$ progression within 24-48 hours]

[Diffuse unilateral or bilateral $\geq 4/5$ with bronchitis, mucus plugs causing atelectasis]

[Question 11: Relative contraindications for bronchoscopy: [Multiple Choice]] ABCD

[Hemodynamic instability]

[Severe coagulation disorders]

[Lung necrosis]

[Pulmonary embolism]

[Suspected airway stenosis]

[Question 12: Indications for corticosteroids in MPP: [Multiple Choice]] ABC

[Significant wheezing]

[Markedly elevated inflammatory markers like CRP, LDH, ferritin]

[Severe MPP]

[Persistent high fever]

[Question 13: First line antibiotics for MPP: [Single Choice]] A

[Macrolides]

[Beta-lactams]

[Tetracyclines]

[Quinolones]

[Question 14: Antibiotics for resistant MPP often include: [Multiple Choice]] CD

[Macrolides]

[Beta-lactams]

[Tetracyclines]

[Quinolones]

[Question 15: Besides anti-infectives, other treatment of MPP includes: [Multiple Choice]] ABCDE

[Supportive care]

[Traditional Chinese medicine]

[Airway clearance]

[Pulmonary rehabilitation]

[Anticoagulation]

[Question 16: Indications for IVIG: [Multiple Choice]] ABCDE

[Central nervous system manifestations]

[Severe skin/mucosa damage]

[Hematologic manifestations]

[Concurrent adenovirus infection]

[Hyperimmune response]

[Question 17: Acute pulmonary embolism triad includes: [Multiple Choice]] ABD

[Chest pain]

[Hemoptysis]

[Fever]

[Dyspnea]

[Question 18: First line test for pulmonary embolism diagnosis: [Single Choice]] B

[MR angiography]

[CT pulmonary angiography]

[Echocardiography]

[Vascular ultrasound]

[Question 19: Anticoagulation can be considered for severe patients with D-dimer elevated \times normal upper limit [Single Choice]] D

[1 \times]

[3 \times]

[5 \times]

[10 \times]

[Question 20: Greatest benefit from thrombolytics if given within \times hours of PE symptoms: [Single Choice]] B

[24 hours]

[48 hours]

[72 hours]

[96 hours]

Table S1 Course arrangement

Order	Topic	Speaker's academic rank
1	Pneumonia severity indexes	Associate senior
2	Current status and strategies for drug-resistant MPP infections	Associate senior
3	Early recognition and treatment strategies for severe/refractory MPP in children	Senior
4	Diagnosis, treatment, and prognosis in pulmonary and cardiac embolism	Senior
5	Rational application of anti-infective drugs	Associate senior
6	Rational application of glucocorticoids in children with MPP	Senior
7	Rational usage of fiberoptic bronchoscopy	Senior