

Community Acquired Pneumonia – Inpatient

Inclusion Criteria

- Suspected community-acquired pneumonia in patients ≥ 3 months old

Exclusion Criteria

- Immunocompromised children – (HIV, SCID, cancer, chemotherapy, autoimmune disease requiring biologic therapy, etc.)
- Home mechanical ventilation
- Presence of empyema or moderate-large pleural effusion ($\geq \frac{1}{4}$ thorax opacified)
- Underlying lung disease other than asthma – (CF, BPD, patients with tracheostomies, etc.)
- Risk for aspiration pneumonia – (neuromuscular disorder, etc.)

Inpatient Admit Criteria

- Inability to tolerate PO
- Hypoxemic ($SpO_2 < 90\%$)
- Respiratory distress (tachypnea, grunting, retractions)
- < 6 months of age
- Concern for home compliance and/or reliable follow-up

Medical Unit Therapies

- Continue antibiotics (if applicable) based on clinician assessment.
- [Viral vs. Bacterial vs. Atypical Bacterial Pneumonia Characteristics](#)
 - Ampicillin IV or PCN G if fully immunized
 - Ceftriaxone if not fully immunized
 - PCN allergy: clindamycin
 - Azithromycin if atypical bacteria involvement is a concern
- O_2 to keep sats $> 90\%$
- IVF, as needed

Repeat Diagnostics

- Repeat blood cultures if initial blood cultures are + (exception is *S. pneumoniae* – no need to repeat blood cultures in this instance).
- Repeat CXR if patient is not clinically improving in 48-72 hours after initiation of antibiotic therapy.

Discharge Criteria

- Overall clinical improvement x 12 – 24°
 - \uparrow level of activity
 - \uparrow appetite
 - \downarrow fever
- Consistent $SpO_2 > 90\%$ on room air x 12 – 24°
- Stable/baseline mental status
- Tolerating home anti-infective regimen (IV or PO) and home O_2 (if applicable) and parents able to demonstrate administration
- ID consult if anticipating outpatient parenteral therapy

PICU Admit Criteria

- Mechanical ventilation
- Noninvasive positive pressure ventilation (NIPPV)
- Impending/concerns for respiratory failure or sepsis
- $SpO_2 < 90\%$ on $FiO_2 \geq 50\%$
- Altered mental status

PICU Diagnostics & Therapies

- Tracheal aspirate for cell count & diff and culture at time of intubation
- Continue antibiotics
 - ceftriaxone + azithromycin + vancomycin
- IVF, as needed
- Respiratory support

Empyema or moderate - large pleural effusion identified

OFF PATHWAY

Consider ID involvement

Empyema or moderate - large pleural effusion identified

OFF PATHWAY

Discharge Instructions

- Treat x 7 – 10 days total
- Follow-up with PCP in 2-3 days

Disclaimer: Pathways are intended as a guide for practitioners and do not indicate an exclusive course of treatment nor serve as a standard of medical care. These pathways should be adapted by medical providers, when indicated, based on their professional judgement and taking into account individual patient and family circumstances.