Outpatient Management of Pediatric Community-Acquired Pneumonia

CHOC Children's

Inclusion Criteria: Previously healthy children > 6 months with presumed bacterial pneumonia
Exclusion Criteria: < 6 months of age (requires hospitalization), respiratory distress or oxygen requirement (requires hospitalization), chronic conditions (i.e. cystic fibrosis, immunodeficiency, living in chronic care facility), concern for aspiration pneumonia, persistence of neonatal cardiac or pulmonary disorder, inpatient status.

Clinical Findings Suggestive of Pneumonia

- Tachypnea, defined as:
  - 2-12mos - RR > 50
  - 1-5yrs - RR > 40
  - 6yrs and above – RR > 20
- Retractions/increased work of breathing
- Localized abnormal breath sounds (i.e. crackles/rales/tubular breath sounds).
- Diffuse findings (including wheezing) more suggestive of atypical or viral etiology.
- Fever

Diagnostic Testing

Routine bloodwork/testing is ***not*** indicated for uncomplicated outpatient pneumonias.

For patients <u>not</u> responding to previous therapy, concern for empyema, or when contemplating hospital admission:

- CXR – 2 view
- Blood culture
- CBC, CRP, ESR
- RSV, rapid Influenza A/B, if viral etiology expected

↓

Pulse oximetry spot check, notify MD of sats < 93%

↓

Antibiotics

- Amoxicillin 45 mg/kg po BID, for weight < 45 kg (90 mg/kg/day)
- Amoxicillin 2 grams po BID x 10 days po BID, for weight > 45 kg
- If temperature < 39 and atypical organism is suspected: Use azithromycin
- Use azithromycin for penicillin allergic patient
- If labs/blood culture/CXR being ordered and patient is being considered for admission, give ceftriaxone 50 mg/kg IM x 1, MAX 2 grams for weight > 40 kg

Recommendations/Considerations

- Nov-Mar, < 2 yrs old, with diffuse crackles or wheezing on lung exam, consider viral etiology. If high fever, consider influenza testing and treatment.
- Routine CXRs are not necessary to confirm the diagnosis of suspected community-acquired pneumonia in healthy children with mild disease. CXR findings do not consistently alter patient management and they do not differentiate viral from bacterial etiology. Typical findings may be absent in early disease or in patients with significant dehydration.
- Viral etiologies of CAP have been documented in up to 80% of children younger than 2 years of age
- PCR based testing should be used, if available
- Azithromycin Dosing: 10 mg/kg po day 1, then 5mg/kg po days 2-5. There is also data supporting the use of azithromycin 10mg/kg po for 3 days.

Criteria For Hospitalization

- Respiratory distress
- Sustained O2 sat < 90%
- < 6 months of age with suspected bacterial pneumonia
- Children with suspected or documented CAP caused by a pathogen with increased virulence such as MRSA
- Children and infants for whom there is a concern about careful observation at home, who are unable to comply with therapy, or are unable to be followed up should be hospitalized

Approved by Evidence Based Medicine Committee 5/18/16; Revised 7/19/17

Reassess the appropriateness of Care Guidelines as condition changes. This guideline is a tool to aid clinical decision making. It is not a standard of care. The provider should deviate from the guideline when clinical judgment so indicates.

References
Outpatient Community Acquired Pneumonia Care Guideline

Bradley JS, Byington CL, et al. The Management of Community-Acquired Pneumonia in Infants and Children Older Than 3 Months of Age: Clinical Practice Guidelines by the Pediatric Infectious Diseases Society of America. Clinical Infectious Diseases July 2011, p e1-e52.

Harris M, Clark J, et al. Guidelines for the Management of Community Acquired Pneumonia in Children: Update 2011. British Thoracic Society. Thorax 2011; 66: ii1-ii23.