

Acute Bronchitis for Adult and Pediatric Patients Algorithm

Strategies to reduce antibiotic use for acute bronchitis:

1. Use delayed prescription strategies
2. Discuss the expected course of illness and cough duration (2-3 weeks)
3. Explain that the illness is typically caused by a virus (90%) and not bacteria
4. Explain that antibiotics do not significantly shorten illness duration and are associated with adverse effects and antibiotic resistance

File TM. Acute bronchitis in Adults. In: UpToDate, Bond S, Aronson MD (Ed), UpToDate, Waltham, MA. (Accessed on April 13, 2017.) Kinkade S, Long NA. Acute Bronchitis. Am Fam Physician. 2016;94(7):560-565. Lexicomp Online®, Dosing: Adult and Pediatric, Hudson, Ohio: Lexi-Comp, Inc.; April 13, 2017.

Symptoms consistent with acute bronchitis lasting > 5 days:
Cough, sputum production, dyspnea, nasal congestion, headache, and fever

Conduct Differential Diagnosis:
Pneumonia, asthma, exacerbation of COPD, heart failure, upper respiratory tract infection

Symptoms are not consistent with acute bronchitis (Bronchitis is ruled out as a diagnosis)

Acute bronchitis is likely either viral or *Mycoplasma* or *Chlamydia pneumoniae*

Are the following symptoms present: malaise, rhinorrhea, mild or paroxysmal cough, excessive lacrimation, conjunctival infection?

Are the following symptoms present: Dyspnea, bloody or rusty sputum, pulse > 100 bpm, RR > 24 bpm, T > 100°F (37.8°C), Focal consolidation, egophony, or fremitus on chest examination, delirium if age ≥ 75?

Antibiotics are not indicated for treatment.

Yes, pertussis is likely

No

Adult:

1. Azithromycin 500 mg x1 day, then 250 mg x4
2. Erythromycin 500 mg QID x14
3. Clarithromycin 500 mg BID x14
4. If macrolide contraindicated: Bactrim® DS BID x14

Pediatric:

1. Azithromycin 10 mg/kg x1 (Max 500), then 5 mg/kg x4 (Max 250)
2. Erythromycin 40-50 mg/kg/day in 4 divided doses (Max 2 g/day)
3. Clarithromycin 7.5 mg/kg/dose Q12H x7 (Max 500/dose)
4. Bactrim® 4mg/kg/dose Q12H x14

Chest radiography is indicated

Infiltrate

No Infiltrate

Refer to CAP/HAP guidelines

Pneumonia ruled out of differential

Supportive care and symptom management

- Antitussives: Dextromethorphan, guaifenesin (adults only), benzonatate (Rx only)
- Expectorants: Guaifenesin
- Consider Beta2-Agonists if underlying history of lung disease or wheezing or airway obstruction on exam
- Analgesics/Antipyretics: APAP or ibuprofen for fever and pain

Cold and cough medications **are not** recommended in children under 4 years old:
Fluids, APAP/ibuprofen (fever/pain control), saline nasal spray, and if > 1 year honey (antitussive).