

Bronchitis

Key Points:

- 90% of bronchitis is secondary to a viral infection
- Antibiotics should not be prescribed for bronchitis, unless pertussis is suspected
- Antibiotics are no more effective in smokers than nonsmokers
- Cough will last at least 3 weeks for the majority of patients

Diagnosis:

- Acute bronchitis is a clinical diagnosis based on cough in the absence of other signs and symptoms of other respiratory causes (pneumonia, asthma, COPD, etc)
- Fever and sputum production may or may not be present

Microbiology:

- 90% of bronchitis is viral (coronaviruses, rhinoviruses, RSV, adenoviruses, parainfluenza and influenza viruses)

Imaging:

- Chest x-ray is not necessary
- Indications for chest x-ray
 - Heart rate >100 beats/min
 - Respiratory rate >24 breaths/min
 - Temperature of >38°C
 - Chest examination findings of focal consolidation, egophony, or fremitus

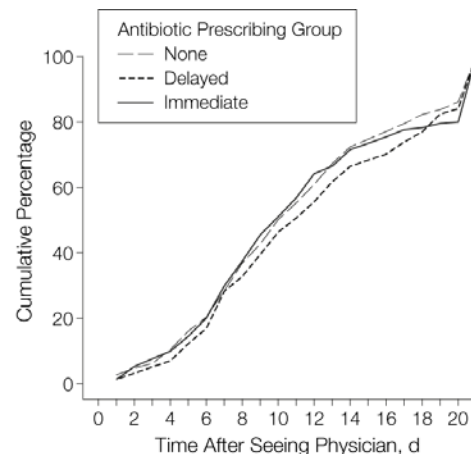
Prognosis and Course:

- Cough will last about 3 weeks for the majority of patients and for at least 1 month in about 25% of patients
- Sputum color does not indicate the presence of a bacterial infection

Treatment:

- Antibiotics should not be prescribed for bronchitis
- Meta-analysis of 9 randomized trials showed no benefit of antibiotics
- There is no good quality evidence supporting or refuting the benefit of antitussives or mucolytics
- Symptomatic Treatment Options:
 - Intranasal ipratropium (URI symptoms, rhinorrhea)
 - Decongestants (URI symptoms, post nasal drip)
 - Inhaled bronchodilator (concurrent wheeze)
 - Antitussive – dextromethorphan

Duration of Cough After Physician Visit



References:

1. Essential Evidence Plus. Acute Bronchitis
2. NCQA. An Algorithm to Improve Appropriate Antibiotic Use for Patients With Acute Bronchitis
3. Little P, Rumsby K, Kelly J, et al. Information leaflet and antibiotic prescribing strategies for acute lower respiratory tract infection. A randomized controlled trial. *JAMA* 2005;293:3029-3035.
4. Linder JA, Sim I. Antibiotic treatment of acute bronchitis in smokers: a systematic review. *J Gen Intern Med* 2002;17:230-234.