Adult Acute Bronchitis Guideline

Adult Patient Presents with Cough and Chest Signs/Symptoms Consistent with Acute Bronchitis
Patient presents with a cough lasting > 5 days and < 3 weeks

EVALUATION AND TREATMENT

Cough Is Not Paroxysmal and/or Includes Post-Tussive Vomiting

Evaluate if patient has a past medical history for co-morbidities:
- Underlying lung disease (COPD, bronchiectasis)
- Congestive heart failure
- Immunocompromise (HIV infection, malignancy, immunosuppressive medications)

Cough Is Paroxysmal and/or Includes Post-Tussive Vomiting

Consider evaluation and treatment for pertussis

Refer to ***Sanford Clinic Pertussis Guideline***

Co-Morbidities Are Present

If COPD is present, refer to ***Sanford Clinic Adult Exacerbation of Chronic Bronchitis Outpatient Guideline***

High Risk Patient Exclusion

Patients with co-morbidities are considered high-risk and therefore excluded from this guideline

Co-Morbidities Are Not Present

Review patient's risk factors for pneumonia:
- HR > 100 beats / minute
- RR > 24 breaths / minute
- Oral temperature > 100.4 °F/38 °C
- Age > 75 years
- Decreased oxygen saturation from baseline
- Exam findings concerning for focal consolidation (rales, egophony, tactile fremitus, etc.)

No Risk Factors For Pneumonia

Review if throat clearing or nasal drainage are notable

Upper Airway Symptoms Not Present

- Acute bronchitis most likely
- Review if wheezing is present

Wheezing Not Present
- **No antibiotics**
- Provide supportive care, including acetaminophen, NSAIDs, cough suppressants, etc.

Wheezing Is Present
- **No antibiotics**
- Consider use of β2-agonist bronchodilators

Upper Airway Symptoms Are Present

- **No antibiotics**
- Common cold most likely
- Provide supportive care, including acetaminophen, NSAIDs, decongestants, cough suppressants, etc.

Risk Factors For Pneumonia

Recommend chest x-ray to evaluate for pneumonia

Positive
Treat for pneumonia

Negative
Close clinical follow-up

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Clinical Pearls

- **Antibiotics are not routinely recommended**; < 10% of acute bronchitis episodes are bacterial and even these typically improve without antibiotic therapy
- Depending on the antibiotic, 5-25% of patients will develop antibiotic-associated diarrhea
- Purulent or green sputum does not predict bacterial infection
- Smokers without underlying lung disease are not considered higher risk than the general population
- Expectorants and mucolytic agents have not been found to be beneficial
- Maintain a low threshold for chest x-ray in elderly patients due to lack of distinct pneumonia symptoms
- Consider procalcitonin to evaluate for bacterial etiology
- Counsel patients that cough can persist for 10-21 days and occasionally up to 6 weeks

References

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2. Braman SS. Chronic cough due to acute bronchitis: ACCP evidence-based clinical practice guidelines. *Chest* 2006; 129:95S–103S.
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4. Centers for Disease Control and Prevention. Get Smart Campaign. http://www.cdc.gov/getsmart/campaign-materials/adult-treatment.html. Accessed August 18, 2011.
5. Bartlett JG. Clinical Practice. Antibiotic-associated diarrhea. *N Eng J Med* 2002; 346:334-339.

REFERENCE INFORMATION

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