Michigan Quality Improvement Consortium Guideline

Management of Uncomplicated Acute Bronchitis in Adults

The following guideline recommends assessment, diagnosis, treatment and counseling interventions for the management of uncomplicated acute bronchitis in adults.

<table>
<thead>
<tr>
<th>Eligible Population</th>
<th>Key Components</th>
<th>Recommendation and Level of Evidence</th>
</tr>
</thead>
</table>
| Adults 18 years or older with clinical suspicion of uncomplicated acute bronchitis | • Perform thorough history (including tobacco use status [A]) and physical exam  
• Assess the likelihood of uncomplicated acute bronchitis using the following items:  
  - Acute respiratory infection (ARI) manifested predominantly by cough, with or without sputum production lasting no more than 3 weeks  
  - No clinical evidence of pneumonia, not immunocompromised  
  - Common cold, reflux esophagitis, acute asthma, or exacerbation of COPD have been considered  
  - Consider other diagnoses if cough persists greater than 3 weeks |  |

**Assessment**

**Clinical Information and Testing:**

• Presumed diagnosis of acute bronchitis:  
  - ARI and cough with or without sputum production lasting no more than 3 weeks  
  - No clinical evidence of pneumonia
• Viral cultures, serologic assays and sputum analyses should not be routinely performed [C]
• **Purulent sputum is not predictive of bacterial infection and by itself is not an indication for a chest x-ray**
• Chest x-ray can be considered if [B]:  
  - Heart rate > 100 beats/min  
  - Respiratory rate > 24 breaths/min  
  - Oral temperature > 38° C (100.4° F)  
  - Lung examination suggestive of focal consolidation

**Diagnosis**

**Treatment**

• Avoid antibiotics [A]
• Symptomatic treatment only.
• Beta2 agonist bronchodilators should not be routinely used to alleviate cough. In select patients with significant wheezing, short-term treatment with beta2 agonist bronchodilators may be useful [C]
• Antitussive agents can be offered for short-term symptomatic relief of coughing [C]
• Mucolytic agents are not recommended (no consistent favorable effect) [D]

**Education and counseling**

Educate patient/family regarding:

• Use of antibiotics is not recommended [A]
• Condition is a self-limited respiratory disorder
• Inform patient that cough may last for 3 weeks
• Rest and increase oral fluid intake
• Smoking cessation and second-hand smoke avoidance [C] (See also MQIC Tobacco Control Guideline)

Levels of Evidence for the most significant recommendations:

- A = randomized controlled trials
- B = controlled trials, no randomization
- C = observational studies
- D = opinion of expert panel

This guideline lists core management steps. It is based on several sources including the American College of Chest Physicians Chronic Cough Due to Acute Bronchitis: ACCP Evidence-Based Clinical Practice Guidelines, 2006 (www.chestjournal.org). Individual patient considerations and advances in medical science may supersede or modify these recommendations.


MQIC.ORG