Michigan Quality Improvement Consortium Guideline

May 2016

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.

Eligible Population	Key Components	Recommendation and Level of Evidence
Adults 18 years or older with clinical suspicion of uncomplicated acute bronchitis	Assessment	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 Consider common cold, reflux esophagitis, acute asthma, or exacerbation of COPD Consider other diagnoses if cough persists greater than 3 weeks
	Diagnosis	**<u>Clinical Information and Testing</u>:** 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]** If pertussis is suspected (history of exposure/characteristic cough), consider PCR testing. **[D]** Purulent sputum is not predictive of bacterial infection and by itself is not an indication for a chest x-ray or antibiotic therapy. **[C]** 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
	Treatment	**Avoid antibiotics [A]** Symptomatic treatment only. Beta$_2$agonist bronchodilators should not be routinely used to alleviate cough. In select patients with significant wheezing, short-term treatment with beta$_2$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	**<u>Educate patient/family regarding</u>:** **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 Antibiotics for acute bronchitis (Review), Smith SM, Fahey T, Smucny J, Becker LA. The Cochrane Collaboration, 2012, Issue 4; and Inhaled corticosteroids for stable chronic obstructive pulmonary disease (Review), Yang IA, Clarke MS, Sim EHA, Fong KM. The Cochrane Collaboration, 2012, Issue 7; and, 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.