April 2024

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.

Eligible Population	Key Components	Recommendation and Level of Evidence	
Healthy 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): cough, with or without sputum production lasting up to (or ≤) 3 weeks. No clinical evidence of pneumonia, not immunocompromised. Consider common cold, reflux esophagitis, postnasal drainage, acute asthma, or exacerbation of COPD. Consider other diagnoses if cough persists greater than 3 weeks. Consider travel history. Follow CDC guidelines regarding emerging illnesses.	
	Diagnosis	Presumed diagnosis of uncomplicated acute bronchitis: ARI and cough with or without sputum production lasting no more than 3 weeks. No clinical evidence of pneumonia, asthma, COPD, respiratory distress, hypoxemia, hemoptysis or sepsis Chest x-ray is not indicated unless clinical circumstances warrant, e.g., tachycardia, tachypnea, fever. 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]** Consideration of testing for treatable viral illnesses (i.e., influenza, COVID-19, RSV) based on current local prevalence. **[D]** Procalcitonin testing warranted for cases in which there is diagnostic uncertainty and need for antibiotics is unclear. **[D]**	
	Treatment	**Avoid antibiotics [A]** (consideration for antibiotic therapy if complicating bacterial infection considered likely **[D]**[1]) 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]** Steroids and mucolytic agents are not recommended. **[D]**	
	Education and counseling	**Educate patient/family: routine use of antibiotics is not recommended** Acute bronchitis is a self-limited respiratory disorder, with cough, lasting up to 3 weeks. Rest and increase oral fluid intake. Smoking cessation and avoidance of second-hand smoke. Reduce viral spread by frequent hand hygiene, cough and sneeze hygiene, avoid touching face, stay home if ill, and wear a mask outside the house. Age-appropriate vaccination according to ACIP guideline. Check CDC website and local health department.	**For patients:**[2] See a healthcare professional if you have: • Temperature higher than 100.4 °F • Cough with bloody mucus • Shortness of breath or trouble breathing • Symptoms that last more than 3 weeks • Repeated episodes of bronchitis

1 Smith MP, Lown M, Singh S, et al. Acute Cough Due to Acute Bronchitis in Immunocompetent Adult Outpatients: CHEST Expert Panel Report. Chest. 2020;157(5):1256-1265. doi:10.1016/j.chest.2020.01.044

2 File TM. Patient education: Acute bronchitis in adults (Beyond the Basics). In: UpToDate, Section DJ (Ed), UpToDate, Waltham, MA. https://www.uptodate.com/contents/acute-bronchitis-in-adults

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. Individual patient considerations and advances in medical science may supersede or modify these recommendations.

Approved by MQIC Medical Directors May 2008, 2010, 2012, 2014, 2016, 2018, 2020, 2022; April 2024 **MAHP.ORG**