

Table—Continued

Variable	Acute Bronchitis	Pharyngitis	Acute Rhinosinusitis	Common Cold
Persons with penicillin allergy	Never indicated	–	–	Never indicated
No history of type I hypersensitivity (anaphylaxis)	–	1) Oral cephalexin, 20 mg/kg twice daily (maximum, 500 mg/dose) for 10 d 2) Oral cefadroxil, 30 mg/kg once daily (maximum, 1 g) for 10 d	1) Oral doxycycline, 100 mg twice daily or 200 mg once daily for 5 to 7 d 2) Oral levofloxacin, 500 mg once daily for 5 to 7 d 3) Oral moxifloxacin, 400 mg once daily for 5 to 7 d	–
History of anaphylaxis	–	1) Oral clindamycin, 7 mg/kg 3 times daily (maximum, 300 mg/dose) for 10 d 2) Oral azithromycin, 12 mg/kg once daily (maximum, 500 mg) for 5 d 3) Oral clarithromycin, 7.5 mg/kg twice daily (maximum, 250 mg/dose) for 10 d	1) Oral doxycycline, 100 mg twice daily or 200 mg once daily for 5 to 7 d 2) Oral levofloxacin, 500 mg once daily for 5 to 7 d 3) Oral moxifloxacin, 400 mg once daily for 5 to 7 d	–
References	10, 11, 21, 22	12, 13	14–18	9, 19, 23

showed no significant differences in the number of days to cough resolution (24). Although macrolides (azithromycin) are frequently prescribed for patients with a cough, one study showed that patients with acute bronchitis treated with a macrolide had significantly more adverse events than those receiving placebo (29).

Patients may benefit from symptomatic relief with cough suppressants (dextromethorphan or codeine), expectorants (guaifenesin), first-generation antihistamines (diphenhydramine), decongestants (phenylephrine), and β -agonists (albuterol), although data to support specific therapies are limited. β -Agonists have not been shown to benefit patients without asthma or chronic obstructive lung disease (30), and symptomatic therapy has not been shown to shorten the duration of illness (30, 31). Over-the-counter symptomatic relief has a low incidence of minor adverse effects, including nausea, vomiting, headache, and drowsiness (32). Providers and patients must weigh the benefits and potential for adverse effects when considering symptomatic therapy.

High-Value Care Advice 1

Clinicians should not perform testing or initiate antibiotic therapy in patients with bronchitis unless pneumonia is suspected.

PHARYNGITIS

Pharyngitis is usually a benign, self-limited illness characterized by a sore throat that is worse with swallowing, with or without associated constitutional symptoms. It is a common outpatient condition, with about 12 million visits representing 1% to 2% of all ambulatory care visits in the United States annually (33). Although antibiotics are usually unnecessary, they are prescribed at most visits for pharyngitis (34).

Determining the Likelihood of a Bacterial Infection

Most pharyngitis cases have a viral origin; common causes include rhinovirus, coronavirus, adenovirus, herpes simplex virus, parainfluenza, enterovirus, Epstein-Barr virus, cytomegalovirus, and influenza (35). Patients with a sore throat and associated symptoms, including cough, nasal congestion, conjunctivitis, hoarseness, diarrhea, or oropharyngeal lesions (ulcers or vesicles), are more likely to have a viral illness and should not have further testing. Providers must rule out group A *Streptococcus*, the predominant bacterial pathogen, and exclude more serious infections (13). Patients with symptoms suggesting a bacterial cause should be tested for group A *Streptococcus* with a rapid antigen detection test, throat culture, or both. Suspicious symptoms include persistent fever, rigors, night sweats, tender lymph nodes, tonsillopharyngeal exudates, scarlatiniform rash, palatal petechiae, and swollen tonsils.

Clinical scoring criteria have been developed to help determine the likelihood of a bacterial cause. The most widely used are the modified Centor criteria, which include fever by history, tonsillar exudates, tender anterior cervical adenopathy, and absence of cough (36). Because the Centor criteria have a low positive predictive value for determining the presence of group A streptococcal infection, the IDSA suggests that they can be used to identify patients who have a low probability of group A streptococcal pharyngitis and do not warrant further testing (13). Patients who meet fewer than 3 Centor criteria do not need to be tested. Those who present with unusually severe signs and symptoms, such as difficulty swallowing, drooling, neck tenderness, or swelling, should be evaluated for rare throat infections (such as peritonsillar abscess, parapharyngeal abscess, epiglottitis, or Lemierre syndrome). Recent data suggest that *Fusobacterium necrophorum* is implicated in approximately 10% to 20% of endemic pharyngitis cases in adolescents (37,