Acute pharyngitis (sore throat) accounts for 1% to 2% of all visits to outpatient departments, physician offices and emergency departments. A wide range of infectious agents, most commonly viruses, cause acute pharyngitis. Approximately 5% to 15% of adult cases and 15% to 30% of pediatric cases are caused by group A β-hemolytic streptococcus (GABHS). Making the diagnosis of GABHS (or any differential diagnosis) is important in the prevention of rheumatic fever and/or other suppurative complications, hastening illness resolution, and preventing transmission.

The large majority of patients with acute pharyngitis have a self-limited illness, for which supportive care ONLY is needed. **Antibiotic treatment for patients with pharyngitis benefits only those with a bacterial pharyngeal infection.**

With increasing antibiotic resistance because of antibiotic overuse, accurate diagnosis is imperative. Prescribing antibiotics using a solitary diagnosis of acute pharyngitis – **without** performing a rapid strep screen is imprudent.

**DIAGNOSIS**

Clinically evaluate all patients with pharyngitis for the presence of the four Centor criteria:

- History of Fever
- Tonsillar Exudates
- Absence of Cough

Tender anterior cervical lymphadenopathy (Lymphadenitis)

These criteria along with other clinical features by Physical Exam should be used to guide treatment for pharyngitis. The following should be assessed:

- Airway patency
- Temperature (fever)
- HEENT exam i.e. rhinorrhea (usually associated with a viral cause)
- Lymphadenopathy
- Cardiovascular
- Pulmonary
- Abdomen (Hepatosplenomegaly)
- Skin (scarlatiniform rash)

1. a.) **Adults:**
   - Perform a rapid antigen test only if the patient has two or more of the above Centor criteria **unless** the one criteria is tonsillar exudates.
   - Limit antibiotic therapy to only those patients with positive test results.
b.) **Pediatrics:**
- Perform a rapid antigen test for patients with one or more of the Centor criteria.
- Twenty four hour throat cultures should be done on all Pediatric patients with a negative rapid strep.
- For those patients with 2 or more of the Centor criteria, a negative rapid strep and a “pending” throat culture, empirical use of antibiotics may be considered. Antibiotics prescribed in this case scenario must include: a follow-up call to the patient to report the culture results, and if negative will be instructed to discontinue the use of the prescribed antibiotic.

2. Throat cultures are NOT recommended for the routine primary evaluation of ADULT patients with pharyngitis or for confirmation of negative results on rapid antigen tests when the test sensitivity exceeds 80%.

3. Throat cultures may be indicated as part of investigations of outbreaks of GABHS disease, for monitoring the development and spread of antibiotic resistance, or when such pathogens as gonococcus are being considered.

**TREATMENT:**
- All patients with pharyngitis should be offered appropriate doses of analgesics and antipyretics, as well as other supportive care.
- The preferred antibiotic for treatment of acute GABHS pharyngitis is penicillin or a cephalosporin. Erythromycin may be used in a penicillin-allergic patient (keeping in mind that macrolides are ineffective on some bacterial infections (i.e. the rare F. necrophorum).
- Patients will receive a follow up call to report any culture results when available.
- A follow up plan of care will be discussed with the patient in the event they feel their symptoms worsen or if they do not believe they are improving.

Antibiotics are prescribed unnecessarily to a substantial majority (approximately 75%) of patients with acute pharyngitis. The inappropriate use of antibiotics can have significant negative consequences both to individual patients and to public health. Remember: Effective communication is more important than an antibiotic for patient satisfaction.

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<thead>
<tr>
<th>TIPS TO REDUCE ANTIBIOTIC USE</th>
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<tr>
<td>Tell patients that antibiotic use increases the risk of an antibiotic-resistant infection (offer educational hand-outs)</td>
<td>Recommend specific symptomatic therapy</td>
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<tr>
<td>Identify and validate patient concerns, provide reassurance</td>
<td>Spend time answering questions and offer a plan for follow-up if symptoms worsen</td>
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References

- Medscape Today @ http://emedicine.medscape.com/emergency_medicine
- Centers for Disease Control and Prevention (CDC), Get Smart Campaign, Acute Pharyngitis in Adults information sheet @ www.cdc.gov