Acute Pharyngitis in Adults

Principles apply to the diagnosis and treatment of Group A β-hemolytic streptococcal (GABHS) pharyngitis in otherwise healthy adults.

Background

- Only 5-15% of adult cases of acute pharyngitis are caused by GABHS.
- It is estimated that 3,000 to 4,000 patients with GABHS must be treated for every 1 case of acute rheumatic fever prevented.
- Antibiotic therapy of GABHS hastens resolution by 1-2 days if initiated within 2-3 days of symptom onset.

Diagnosis

- Lab testing is not indicated in all patients with pharyngitis. Instead, all adults should be screened for the following:
  - History of fever
  - Lack of cough
  - Tonsillar exudates
  - Tender anterior cervical adenopathy
- Patients with none or only one of these findings should not be tested or treated for GABHS.
- Rapid streptococcal antigen test (RAT) is recommended for patients with two or more criteria, with antibiotic therapy restricted to those with positive test results.
- Cultures are not recommended for routine evaluation of adult pharyngitis or for confirmation of negative results on rapid antigen tests if test sensitivity >80%.
- Throat cultures maybe useful for outbreak investigation, monitoring rates of antibiotic resistance, or when other pathogens (e.g., gonococcus) are being considered.

Comparison of Diagnostic Strategies*

<table>
<thead>
<tr>
<th>% of patients with GABHS who are correctly treated</th>
<th>Test for 2+ criteria and treat positives</th>
<th>Empiric treatment for 3-4 criteria</th>
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<tr>
<td>60%-70%</td>
<td>60%-70%</td>
<td>70%-80%</td>
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% of patients receiving antibiotics 11% 33%

*Assumptions: RAT sensitivity = 80%; RAT specificity = 90%; GABHS prevalence = 10%.

Treatment

- Penicillin is recommended for initial treatment of GABHS.
  - Erythromycin is recommended for penicillin-allergic patients.
  - Penicillin-resistant GABHS have not been reported in the United States.
- Extended spectrum macrolides and fluoroquinolones are not appropriate for uncomplicated GABHS pharyngitis.

TIPS TO REDUCE ANTIBIOTIC USE

- Tell patients that antibiotic use increases the risk of an antibiotic-resistant infection.
- Identify and validate patient concerns.
- Recommend specific symptomatic therapy.
- Spend time answering questions and offer a contingency plan if symptoms worsen.
- Provide patient education materials on antibiotic resistance.
- REMEMBER: Effective communication is more important than an antibiotic for patient satisfaction.
- See www.cdc.gov/getsmart/ or contact your local health department for more information and patient education materials.

Key Reference