



# Acute Pharyngitis in Adults

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

**Clinical screening for GABHS pharyngitis could substantially reduce unnecessary antibiotic use.**

## 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.
- Any one of the following three strategies is appropriate for patients with two or more of the above findings:
  - Rapid streptococcal antigen test (RAT) for patients with 2 or more criteria, with antibiotic therapy restricted to those with positive test results.
  - Rapid streptococcal antigen testing of patients with 2 or 3 criteria, with antibiotic therapy restricted to patients with all 4 findings and those with positive test results.
  - Empiric antibiotic therapy for patients with 3 or 4 criteria; no diagnostic testing.

- 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 may be useful for outbreak investigation, monitoring rates of antibiotic resistance, or when other pathogens (e.g., gonococcus) are being considered.

## Comparison of Diagnostic Strategies\*

	Test for 2+ criteria and treat positives	Empiric treatment for 3-4 criteria
% of patients with GABHS who are correctly treated	60%-70%	70%-80%
% 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/drugresistance/community](http://www.cdc.gov/drugresistance/community) or contact your local health department for more information and patient education materials.

## Key Reference

Cooper RJ et al. Principles of appropriate antibiotic use for acute pharyngitis in adults: Background. *Annals of Internal Medicine* 2001;134(6):509-17.