



**INLAND EMPIRE HEALTH PLAN**

**Clinical Practice Guideline  
for the Diagnosis and Management of  
Pharyngitis**

303 E. Vanderbilt Way, Suite 400, San Bernardino, CA 92408  
Tel. (909) 890-2067 Fax (909) 890-2058

## Background (Pediatric)

Pharyngitis is most common in children between ages 5 and 15 years, usually during the winter and early spring months. Up to 42% of cases of exudative pharyngitis are caused by viral illness. Adenovirus may cause follicular pharyngitis that may be exudative, but is often associated with conjunctivitis. Enterovirus often causes ulcerative lesions. Viral pharyngitis is more common in children under 3 years of age, while group A  $\beta$ -hemolytic streptococci (GABHS) are commonly found in children older than 6 years of age.

## Clinical diagnosis

Accurate diagnosis is imperative so that appropriate treatment can be initiated to reduce the complications of group A  $\beta$ -hemolytic streptococci (GABHS).

### History

- Typical symptoms of streptococcal pharyngitis:
  - Sudden onset of fever
  - Sore throat and pain with swallowing
  - Marked malaise
  - Headache
  - Abdominal pain and vomiting
- In children under five years of age, a more chronic course with nonspecific complaints may be seen
  - Headache
  - Abdominal pain
  - Vomiting
  - Fever
- Assess for symptoms suggestive of peritonsillar abscess (in addition to pharyngitis)
  - Unilateral pain
- Assess for symptoms suggestive of viral etiology for pharyngitis
  - Rhinorrhea, cough, hoarseness, conjunctivitis, coryza, anterior stomatitis, discrete ulcerative lesions, viral exanthem, and diarrhea suggest alternative diagnosis
  - Cough and rhinitis are found in less than 10% of children with GABHS infections.

### Physical findings

Examine oropharynx for findings of infection

- Pharynx
  - Often red (erythematous)
  - Exudates on tonsils
- Petechiae on the soft palate are common

- Papillae on the tongue may be red and swollen (strawberry tongue)
- Anterior chain nodes are swollen and tender
- Possible peritonsillar abscess
  - Severe trismus
  - Displacement of swollen soft palate toward unaffected side
- Rash
  - Rarely occurs in children under 2 years
  - Appears sunburned and feels roughened
  - Most intense in the axillae and groin and on the abdomen and trunk
  - Viral exanthem strongly suggests pathogen other than GABHS

### **Diagnostic testing**

- Not indicated when the clinical and epidemiologic findings do not suggest GABHS.
- Rapid antigen tests are 60-95% sensitive and over 95% specific.
- Throat culture is the most sensitive test.
  - Re-culturing after treatment is usually not indicated.
- Urinalysis only if signs and symptoms dictate
  - Dark “tea-colored” urine is reported
  - Symptoms of UTI
  - Unexplained fever

### **Treatment**

#### **Supportive Care**

- Salt water gargling for older children
- Inhalation of steam for younger children unable to gargle salt water
- Cool liquids
- Acetaminophen and ibuprofen

#### **Pharmacotherapy**

1. Group A  $\beta$ -hemolytic streptococcus (GABHS) is the causal agent in approximately 10% of adult cases of pharyngitis. The large majority of adults with acute pharyngitis have self-limited illness, for which supportive care only is needed.
2. Antibiotic treatment of adult pharyngitis benefits only those patients with GABHS infection. All patients with pharyngitis should be offered appropriate doses of analgesics and antipyretics, as well as other supportive care.

3. Limit antibiotic prescriptions to patients who are most likely to have GABHS infection. Clinically screen all adult patients with pharyngitis for the presence of the four Centor criteria: history of fever, tonsillar exudates, no cough, and tender anterior cervical lymphadenopathy (lymphadenitis). Do not test or treat patients with none or only one of these criteria, since these patients are unlikely to have GABHS infection. For patients with two or more criteria, the following strategies are appropriate:
  - a. Test patients with two, three, or four criteria by using a rapid antigen test, and limit antibiotic therapy to patients with positive test results;
  - b. Test patients with two or three criteria by using a rapid antigen test, and limit antibiotic therapy to patients with positive test results or patients with four criteria;
  - c. Do not use any diagnostic tests, and limit antibiotic therapy to patients with three to four criteria.
4. The preferred antibiotic for treatment of acute GABHS pharyngitis is penicillin or erythromycin in penicillin-allergic patient.

### **Clinical indications for referral**

- To otolaryngologist for:
  - Recurrent strep throat
    - Six or more culture- or test-documented GABHS tonsillar infections in one year, or
    - Three to four episodes in each of the previous two years
  - Suspected peritonsillar abscess

### **Clinical indications for surgery or invasive treatment**

- Tonsillectomy might be considered if:
  - Six or more culture- or test-documented GABHS tonsillar infections in one year, or
  - Three to four episodes in each of the previous two years despite appropriate antibiotic treatment
- Peritonsillar abscess

### **References**

Milliman & Robertson Care Guidelines, Primary & Pharmaceutical care 2001 Edition.

Snow V, et al. Principles of appropriate antibiotic use for acute pharyngitis in adults. *Ann Intern Med* 2001;134:506-508.

Cooper RJ, et al. Principles of appropriate antibiotic use for acute pharyngitis in adults: Background. *Ann Intern Med* 2001;134:509-517.