This guideline is not intended to replace a provider's judgment, but rather to support the decision-making process, which must be individualized for each patient's circumstances.

**Sore Throat Suggestive of Streptococcal Pharyngitis**

Clinical symptoms (TABLE A) suggestive of streptococcal pharyngitis are present (at least five symptoms):

- Age 5-17 years
- Season (late fall, winter, early spring)
- Evidence of acute pharyngitis (erythema, edema, and/or exudates)
- Tender enlarged anterior cervical lymph nodes
- Fever (between 101 °F/38.3 °C and 103 °F/39.4 °C)
- Absence of cough or other symptoms associated with viral upper respiratory tract infections

**< 5 Clinical Symptoms**

* Provide Symptomatic Treatment (TABLE B) and Communication (TABLE C) for Viral Pharyngitis

**≥ 5 Clinical Symptoms**

* Perform Rapid Strep Antigen Test (RAT)

  **Negative Rapid Strep Antigen Test**
  - Reflex to GABHS confirmatory testing
  - Await results to determine if antibiotics are indicated

  **Positive Rapid Strep Antigen Test**
  - *First Choice Penicillin (PCN) or Amoxicillin (GABHS resistance 0)*
    - 250 mg po two times a day or three times a day for 10 days (< 27 kg)
    - 500 mg po two times a day or three times a day for 10 days (> 27 kg, adolescents and adults)
    - OR
    - Amoxicillin 50 mg/kg/day (max 1-1.2 g/day) for 10 days; once daily dosing is appropriate
    - OR
    - Penicillin G benzathine IM
      - 600,000 U (< 27 kg) single dose
      - 1.2 million U (> 27 kg) single dose

* Non-GABHS (group B, C, G) may be part of normal oral flora and typically do not warrant antibiotic treatment. If clinical situation warrants, consider respiratory culture-source throat.

**Sore Throat Suggestive of Viral Origin**

Symptoms consistent with an acute sore throat of viral origin:

- Conjunctivitis
- Coryza
- Hoarseness
- Cough
- Diarrhea
- Characteristic exanthems
- Characteristic enanthems

**Clinical symptoms (TABLE A)** suggest pharyngitis from non-group A betahemolytic streptococci (GABHS) or may be part of normal oral flora (Non-GABHS), and must be confirmed by culture or DNA amplification testing.

**Pediatric Patient Presents with Signs/Symptoms of Sore Throat**

**Provide Symptomatic Treatment (TABLE B) and Communication (TABLE C) for Viral Pharyngitis**

**< 5 Clinical Symptoms**

- Conjunctivitis
- Coryza
- Hoarseness
- Cough
- Diarrhea
- Characteristic exanthems
- Characteristic enanthems

**≥ 5 Clinical Symptoms**

- Perform Rapid Strep Antigen Test (RAT)

  **Negative Rapid Strep Antigen Test**
  - Reflex to GABHS confirmatory testing
  - Await results to determine if antibiotics are indicated

  **Positive Rapid Strep Antigen Test**
  - *First Choice Penicillin (PCN) or Amoxicillin (GABHS resistance 0)*
    - 250 mg po two times a day or three times a day for 10 days (< 27 kg)
    - 500 mg po two times a day or three times a day for 10 days (> 27 kg, adolescents and adults)
    - OR
    - Amoxicillin 50 mg/kg/day (max 1-1.2 g/day) for 10 days; once daily dosing is appropriate
    - OR
    - Penicillin G benzathine IM
      - 600,000 U (< 27 kg) single dose
      - 1.2 million U (> 27 kg) single dose

* Non-GABHS (group B, C, G) may be part of normal oral flora and typically do not warrant antibiotic treatment. If clinical situation warrants, consider respiratory culture-source throat.
Features suggestive of GABHS (Group A beta-hemolytic streptococcus) as causative agent:

- Sudden-onset sore throat
- Pain on swallowing
- Fever
- Scarlet fever rash
- Headache
- Tonsillopharyngeal erythema
- Tonsillopharyngeal exudates

- Nausea, vomiting, and abdominal pain
- Soft palate petechiae
- Beefy, red, swollen uvula
- Tender, enlarged anterior cervical nodes
- Patient 5 to 17 years of age
- Presentation in winter or early spring (in temperate climates)
- History of exposure

Acetaminophen or ibuprofen

Oral rinses for oral throat ulcers-viral. Equal parts of diphenhydramine and Maalox® (magnesium hydroxide, aluminum hydroxide, and simethicone). Children ≥ 6-8 years may swish and spit mixture.

Salt-water gargles. Most recipes suggest 1/4 to 1/2 teaspoon of salt per cup (8 ounces) of warm water. The water should be gargled and then spit out (not swallowed). Children younger than six to eight years are not able to gargle properly. It is not clear if this treatment is effective, but it is unlikely to be harmful.

Other interventions - Sipping warm beverages (eg, honey or lemon tea, chicken soup), cold beverages, or eating cold or frozen desserts (eg, ice cream, popsicles). These treatments are safe for children.

Honey should not be given to children younger than 12 months due to the potential risk of botulism poisoning.

Alternative therapies - Health food stores, vitamin outlets, and Internet Web sites offer alternative treatments for relief of sore throat pain. We do not recommend these treatments due to the risks of contamination with pesticides/herbicides, inaccurate labeling and dosing information, and a lack of studies showing that these treatments are safe and effective.

Sprays containing topical anesthetics (benzocaine) - not recommended for children (can cause allergic reactions)

Lozenges are not recommended for children

Sore throat caused by viral infections usually last 5-7 days

Treatments to reduce pain may be helpful but will not help to eliminate the virus

Antibiotics do not improve throat pain caused by a virus and are not recommended

A child with a viral infection is usually allowed to return to school when there has been no fever for 24 hours and the child feels well enough to pay attention
This guideline is not intended to replace a provider’s judgment, but rather to support the decision-making process, which must be individualized for each patient’s circumstances.

Clinical Pearls

- Group A beta-hemolytic streptococcus (GABHS) pharyngitis is uncommon in children ≤ 2-3 years of age
- Repeat testing for GABHS in patients treated for GABHS is not indicated
- In young children, GABHS manifests with prolonged nasal discharge, tender anterior cervical adenopathy, and low-grade fever. Microbiologic testing may be warranted for symptomatic young children, particularly if they have been exposed to contacts with GABHS infection.
- Vesicles in posterior pharynx may indicate Herpangina (Coxsackie virus)
- Patient with buccal or gingival lesions may indicate a differential diagnosis that includes herpetic stomatitis and Stevens Johnson syndrome (rash and multisystemic involvement)
- Rule out infectious mononucleosis and HIV in patient with prominent posterior cervical or diffuse lymphadenopathy
- Consider diphtheria in patient unimmunized with recent travel
- Oral sexual contact: consider gonococcal pharyngitis
- Rule out infectious mononucleosis in patient with persistent fevers
- For acutely ill patient, consider epiglottitis, retropharyngeal abscess, tonsillar hypertrophy secondary to Epstein Barr virus infection, diphtheria and Lemierre’s syndrome need to be considered in the differential diagnosis and appropriate care instituted
- Unilateral enlarged tonsil crossing the midline: peritonsillar abscess
- Tetracyclines, sulfonamides, fluoroquinolones should NOT be used for treatment of GABHS
- Children with streptococcal pharyngitis should not return to school or child care until at least 24 hours after beginning appropriate antibiotic therapy

References