### Pediatric (Age 5-15 Years) Pharyngitis Guideline

**Sore Throat Suggestive of Streptococcal Pharyngitis**

Clinical symptoms (TABLE A) suggestive of streptococcal pharyngitis are present (at least five symptoms):
- Age 5-15 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**

**Positive Rapid Strep Antigen Test**

- **Antibiotic Treatment and Communication (TABLE D) IS Indicated**
  - **First Choice Penicillin (PNC) or Amoxicillin (GABHS resistance 0)**
    - Penicillin V drug of choice
      - 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)
    - Amoxicillin 50 mg/kg/day (max 1-1.2 g/day) for 10 days: once daily dosing is appropriate
    - Penicillin G benzathine IM
      - 600,000 U (< 27 kg) single dose
      - 1.2 million U (> 27 kg) single dose

#### ≥ 5 Clinical Symptoms

**Perform Rapid Strep Antigen Test (RAT)**

**Negative Rapid Strep Antigen Test**

- **Reflex to GABHS Culture**
  - Await results to determine if antibiotics are indicated

**Positive Rapid Strep Antigen Test**

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**Non anaphylactic reaction to PNC:**
- First Generation Cephalosporin:
  - Cephalexin (Keflex) 25-50 mg/kg/day PO divided three times a day (daily adult dose 1-2 grams)

**Anaphylactic reaction to PNC:**
- Clindamycin (Cleocin) 20 mg/kg per day in three divided doses (max 1.8 g/day)
- Azithromycin (Zithromax) 12 mg/kg/day on day 1 (max 500 mg/dose), followed by 6 mg/kg/day on days 2 to 5 (max 250 mg/dose)
- Erythromycin, clarithromycin (10 days)
  - Macrolides higher rate of GI adverse effects
  - Macrolide resistance 5-8%
  - Clindamycin resistance 6%

^ 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.
TABLE A: Clinical Symptoms of Streptococcal Pharyngitis

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 15 years of age
- Presentation in winter or early spring (in temperate climates)
- History of exposure

TABLE B: Symptomatic Treatment of Viral Pharyngitis

- 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 - not recommended for children

TABLE C: Communication for Viral Pharyngitis

- 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

TABLE D: Communication for Streptococcal Pharyngitis

Instruct parents to seek medical attention if:
- Difficulty swallowing or breathing
- Excessive drooling in an infant or young child
- Persistent fevers (≥ 101 °F/38.3 °C) or symptoms for > 3 days after initiation of therapy
- Swelling of the neck
- Child is unable or unwilling to drink or eat
- Voice sounds muffled
- Child has a stiff neck or difficulty opening the mouth

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. Please provide feedback to antibioticutilization@sanfordhealth.org.
References