Quality Care Network | Rainbow Care Connection

Clinical Practice Guidelines

Outpatient Group A Streptococcal (GAS) Pharyngitis

In the pediatric patient, 70-80% of cases of acute pharyngitis are of viral etiology. Selective and accurate screening for GAS pharyngitis is needed in order to appropriately prescribe antibiotics. Accurate and timely diagnosis is needed to treat group A streptococcal (GAS) pharyngitis to help prevent acute rheumatic fever and suppurative complications (e.g. peritonsillar abscess and lymphadenitis) from GAS. The following Clinical Practice Guideline (CPG) was developed by the Rainbow Care Connection (RCC) committee, reviewed by RBC antimicrobial stewardship program and approved by the Quality Care Network Board. The goal of this guideline is to provide a care path to improve quality patient care outcomes.

Signs and Symptoms of GAS Pharyngitis vs. Viral Pharyngitis	
Suggestive of GAS pharyngitis:	**Suggestive of viral pharyngitis:**
• Sudden onset of sore throat • Age 5-15 years • Fever • Headache • Nausea, vomiting, abdominal pain • Tonsillopharyngeal inflammation or exudates • Palatal petechiae • Tender anterior cervical lymph nodes • Winter and early spring presentation • History of exposure to GAS pharyngitis • Scarlatinoform rash	• Conjunctivitis • Coryza • Cough • Diarrhea • Hoarseness • Discrete ulcerative stomatitis • Viral exanthema

Clinical Practice Guidelines for the Diagnosis and Management of Group A Streptococcal Pharyngitis: 2012 Update by the Infectious Diseases Society of America. Clin Infect Dis. 2012;55(101):1279-1282

Follow-up:

- Patient should return for re-evaluation if symptoms persist or worsen within 48-72 hours after starting treatment
- For the patient with recurrent GAS infections, consider medication non-compliance, new exposure from close contacts at home or school/daycare or that the patient may be a GAS carrier who has repeated viral infections. In concern for carrier status, consider testing this patient for GAS when he/she is asymptomatic. If the GAS test is positive that may indicate that the patient may be a GAS carrier. In general, there are few indications to attempt eradication of GAS from carriers

Referral:

- Tonsillectomy is not routinely recommended to help prevent recurrent GAS pharyngitis

Who to test for GAS

- **Patients with overt features of viral pharyngitis do not need to be tested for GAS.** None of the laboratory tests for GAS can distinguish a patient who is acutely infected with GAS from the patient who is an asymptomatic GAS carrier who has a concomitant viral pharyngitis. This will limit the number of asymptomatic GAS carriers with an acute viral illness who are inaccurately diagnosed with GAS and prescribed antibiotics.
- **GAS pharyngitis can't be diagnosed solely on clinical features, and requires a positive GAS test for diagnosis.** Certain signs and symptoms may suggest a bacterial etiology for pharyngitis. When GAS pharyngitis is suspected, a GAS rapid antigen detection test, throat culture, or PCR must be performed. For accurate testing, either or both tonsils/tonsillar fossae and the posterior pharyngeal wall should be swabbed. For children, if the rapid antigen test is negative then a back-up culture or PCR test should be performed.
- **Children < 3 years old should not routinely be tested for GAS pharyngitis.** Children < 3 years old are very unlikely to develop acute rheumatic fever. Consider GAS testing in children < 3 years if they are symptomatic AND have a close family contact with a GAS infection or go to a daycare with a GAS outbreak. For children <3 years, GAS symptoms often include fever, mucopurulent rhinitis, excoriated nares and diffuse adenopathy.
- **Asymptomatic household contacts of patients with GAS pharyngitis should not routinely be tested for GAS.**

Treatment

Antibiotics for Streptococcal Pharyngitis	
First line	**Amoxicillin** 50 mg/kg/day once a day (max 1000 mg/dose) x 10 days **OR** ***Benzathine penicillin G*** IM x1 dose <27 kg 600,000 units ≥27 kg 1,200,000 units
Non-type 1 β-lactam allergy (No hives or signs of anaphylaxis)	**Cephalexin** 40 mg/kg/day divided BID (max 500 mg/dose) x 10 days
Type 1 β-lactam allergy (hives or anaphylaxis)	**Azithromycin** 12 mg/kg once a day (max 500 mg/day) x 5 days
Consider referral to allergist for allergy testing if antibiotic allergy diagnosis uncertain or initial allergy diagnosis was greater than 10 years ago	