

Educational Pearl

Kids with GAS

Streptococcus pyogenes or Group A Streptococcus (GAS) is a bacterial pathogen commonly associated with various clinical presentations in pediatric patients, most commonly, strep throat. Timely and appropriate testing for GAS is crucial to initiate effective management and prevent potential complications.

Who Should Get Tested for GAS?

- 1. **Pediatric Patients with Symptoms:** Consider testing pediatric patients aged 3 to 18 years with acute pharyngitis symptoms and signs; including fever, tonsillar exudates, tender anterior cervical lymphadenopathy, and absence of cough.
- 2. **Household Contacts:** Consider testing asymptomatic household contacts that have an increased risk of complications, such as immunocompromised individuals.

It's important to note that clinical presentation alone cannot reliably differentiate GAS from viral infections; therefore, GAS testing is recommended to confirm the diagnosis.

Who Should NOT Get Tested for GAS?

GAS testing may not be necessary in the following situations:

- 1. **Viral Symptoms:** If a pediatric patient presents with clear viral symptoms (e.g., runny nose, cough, conjunctivitis) without typical GAS symptoms, testing for GAS is not warranted.
- 2. **Alternative Diagnosis:** Patients with an alternative diagnosis explaining their symptoms (e.g., allergic rhinitis, viral conjunctivitis) may not require GAS testing.
- 3. **Positive Rapid Test within the Last Month:** If a patient had a positive rapid GAS test within the last month, it's unlikely that they have a new GAS infection and retesting is not necessary.

How do you Manage GAS?

- 1. **Antibiotics:** For confirmed GAS infections, appropriate antibiotic treatment is crucial to prevent complications and reduce transmission. Penicillin or amoxicillin are the first-line choices for treatment, with alternatives such as cephalexin or clindamycin for patients with <u>allergy</u>.
- 2. **Duration of Treatment:** A 10-day course of oral antibiotics is recommended to ensure complete eradication of the bacteria and reduce the risk of rheumatic fever.
- 3. **Return to School:** Pediatric patients with GAS pharyngitis can usually return to school 24 hours after starting appropriate antibiotic therapy and when they are fever-free without the need for fever-reducing medications.

<u>Key Takeaway:</u> GAS testing in pediatrics plays a pivotal role in confirming the diagnosis of streptococcal infections, especially acute pharyngitis. Identifying appropriate candidates for testing based on symptoms, clinical presentation, and risk factors is essential to guide effective management and prevent potential complications associated with untreated GAS infections.

Created in collaboration between the University of Louisville Pediatrics Antimicrobial Stewardship Program & the University of Kentucky Pediatrics Antimicrobial Stewardship Program