



Michigan Quality Improvement Consortium Guideline

Acute Pharyngitis in Children 3 - 18 Years Old

The following guideline recommends assessment, diagnosis, and treatment of acute pharyngitis in children and adolescents.

Eligible Population	Key Components	Recommendation and Level of Evidence
Children 3 -18 years old with pharyngitis and / or tonsillitis	Etiologies	Viruses account for 70-80% of pharyngitis in children. Group A β -hemolytic Strep (GABHS) accounts for 15-30%. Less common etiologies: Groups C and G Strep, Epstein-Barr Virus, <i>N. gonorrhoeae</i> , <i>C. diphtheriae</i> , <i>Archanobacterium haemolyticum</i> , mycoplasma, chlamydia, <i>Fusobacterium necrophorum</i> .
	Diagnosis	Factors favoring GABHS: 5-15 years old, winter or early spring, Strep exposure, fever, sudden onset sore throat, severe pain on swallowing, absence of cough, tonsillitis, tonsillar exudate, beefy red swollen uvula, palatal petechiae, tender enlarged anterior cervical nodes, scarlatiniform rash. Signs and symptoms of Strep vs. non-Strep overlap broadly. Consider a scoring system, such as Centor to exclude low-risk patients. Suspected Strep must be confirmed by either Strep culture or Rapid Strep Antigen testing, swabbing both tonsils and posterior pharynx. [Note: In most cases, "Strep culture" is all that is needed (GABHS vs. No Strep), rather than complete "Throat culture".] Negative Rapid Strep testing should be validated by Strep culture.
	Treatment of GABHS	Decision to treat with antibiotics should be based on test results. If clinical judgment is to initiate treatment prior to culture results, treatment should be discontinued if culture is negative. Counsel re: contagion, hand washing, hygiene, and need to complete full 10-day antibiotic regimen. Provide symptomatic treatment: rest, non-acidic fluids, soft foods, salt water gargles, lozenges and analgesics (no aspirin < 21 years old). If asymptomatic after 10-day treatment, there is no need to re-culture or re-treat (<u>except</u> in patients with history of Rheumatic Fever). Testing or empiric treatment of asymptomatic contacts is not recommended. Preferred Treatment for Strep Pharyngitis (must complete full course to reduce Rheumatic Fever risk [D]): <ul style="list-style-type: none"> ♦ Penicillin V, oral: Children: 250 mg twice daily or 3 times daily for 10 days; Adolescents: 250 mg 4 times daily or 500 mg twice daily for 10 days ♦ Amoxicillin: 50 mg/kg daily for 10 days (max = 1000 mg/day) ♦ Benzathine Penicillin G, IM: <27 kg: 600,000 U x 1; \geq 27 kg: 1,200,000 U x 1 If allergic to Penicillin, consider the following based on nature/severity of drug allergy and local antibiotic resistance: <ul style="list-style-type: none"> ♦ Cephalexin 20 mg/kg/dose (max = 500 mg/dose) twice daily for 10 days ♦ Azithromycin 12 mg/kg on day 1 (max = 500 mg/dose; then 6 mg/kg (max = 250 mg/dose) on days 2-5 ♦ Clindamycin, oral, 7 mg/kg/dose (max = 300 mg/dose) 3 times daily for 10 days
	Clinical Failure	Child should be seen if failure to respond clinically after 24-48 hours of treatment, or symptoms worsen. Consider: Poor compliance, viral etiology in Strep carrier (would explain positive culture), antibiotic resistance, Infectious Mononucleosis (can co-exist with GABHS), peritonsillar or retropharyngeal abscess (requires prompt ENT evaluation).
Rheumatic Fever Considerations	Risk of Rheumatic Fever is greatly reduced if antibiotics started within 9 days after symptoms began (allowing time to check culture results prior to initiating antibiotics). There is no need to test or treat asymptomatic household contacts <u>unless</u> the index case has Rheumatic Fever.	

Levels of Evidence for the most significant recommendations: A = randomized controlled trials; B = controlled trials, no randomization; C = observational studies; D = opinion of expert panel

This is based on several sources, including: Clinical Practice Guideline for the Diagnosis and Management of Group A Streptococcal Pharyngitis: 2012 Update by the Infectious Diseases Society of America; and the American Heart Association: Prevention of Rheumatic Fever and Diagnosis and Treatment of Acute Streptococcal Pharyngitis ([Circulation](#) 2009; 119:1541-1551; www.ahajournals.org/cgi). Individual patient considerations and advances in medical science may supersede or modify these recommendations.