

## IDSA Updates Guideline for Managing Group A Streptococcal Pharyngitis

**Guideline source:** Infectious Diseases Society of America

**Evidence rating system used?** Yes

**Literature search described?** Yes

**Guideline developed by participants without relevant financial ties to industry?** No

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**Available at:** <http://cid.oxfordjournals.org/content/early/2012/09/06/cid.cis629.full.pdf+html>

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The Infectious Diseases Society of America (IDSA) has updated its 2002 guideline on managing group A streptococcal pharyngitis. The illness primarily occurs in children five to 15 years of age. Patients typically present with sudden onset of a sore throat, pain with swallowing, and fever. Examination shows tonsillopharyngeal erythema, often with

lymphadenitis. The symptoms of streptococcal pharyngitis often overlap with those of viral pharyngitis, and the two cannot be differentiated using clinical features alone unless overt viral features are present.

### Diagnosis

Clinical features of group A streptococcal pharyngitis and viral pharyngitis are listed in *Table 1*. Diagnosis of group A streptococcal pharyngitis should be confirmed using a rapid antigen detection test and/or culture of a throat swab.

A positive result on rapid antigen detection testing is diagnostic for group A streptococcal pharyngitis. A backup culture should be performed in children and adolescents with negative test results. A backup culture generally is not necessary in adults because the incidence of the illness and the risk of subsequent rheumatic fever are low in adults; however, it can be considered. Antistreptococcal antibody titers are not recommended in the routine diagnosis of acute pharyngitis.

Diagnostic testing is not recommended if clinical features strongly suggest a viral etiology (e.g., cough, rhinorrhea, hoarseness, oral ulcers). Testing is generally not recommended in children younger than three years unless the child has risk factors, such as an older sibling with the illness, because the illness is uncommon in this age group. Follow-up posttreatment testing is not routinely recommended, but may be considered. Testing of household contacts of patients with group A streptococcal pharyngitis is not routinely recommended.

### Treatment

Patients with acute group A streptococcal pharyngitis should be treated with an antibiotic that is likely to eradicate the organism,

**Table 1. Features Suggestive of Group A Streptococcal and Viral Pharyngitis**

Group A streptococcal infection	Viral infection
Sudden onset of sore throat	Conjunctivitis
Age 5 to 15 years	Coryza
Fever	Cough
Headache	Diarrhea
Nausea, vomiting, abdominal pain	Hoarseness
Tonsillopharyngeal inflammation	Discrete ulcerative stomatitis
Patchy tonsillopharyngeal exudates	Viral exanthem
Palatal petechiae	
Anterior cervical adenitis (tender nodes)	
Presentation in winter or early spring	
History of exposure to streptococcal pharyngitis	
Scarlatiniform rash	

*Adapted with permission from Shulman ST, Bisno AL, Clegg HW, et al. Clinical practice guideline for the diagnosis and management of group A streptococcal pharyngitis: 2012 update by the Infectious Diseases Society of America. Clin Infect Dis. 2012;55(10):e91.*

usually for 10 days. Penicillin or amoxicillin is commonly recommended because of its narrow spectrum of activity, few adverse effects, and modest cost. Alternative antibiotics for those with penicillin allergy include a first-generation cephalosporin, clindamycin, clarithromycin (Biaxin), or azithromycin (Zithromax). *Table 2* summarizes antibiotic regimens for patients with and without penicillin allergy.

Adjunctive therapy with an analgesic or antipyretic (e.g., acetaminophen, nonsteroidal anti-inflammatory drugs) can be considered to treat moderate to severe symptoms or control a high fever. Aspirin should not be used in children, and adjunctive corticosteroids are not recommended in the treatment of group A streptococcal pharyngitis.

Patients with recurrent pharyngitis and laboratory evidence of group A streptococcus may be chronic carriers who are having repeated viral infections. Antibiotics are not generally recommended in this case, but may be considered in the following situations: (1) during a community outbreak of acute rheumatic fever, acute poststreptococcal glomerulonephritis, or invasive group A streptococcal infection; (2) during an outbreak of group A streptococcal pharyngitis in a closed or partially closed community; (3) when the patient has a family or personal history of acute rheumatic fever; (4) when the patient or family has excessive anxiety about group A streptococcal infections; or (5) when tonsillectomy is being considered only because the patient is a chronic carrier.

**Table 2. Treatment Regimens for Group A Streptococcal Infection**

<i>Drug</i>	<i>Dose/dosage</i>	<i>Duration</i>	<i>Recommendation strength, quality of evidence</i>
<b>Patients without penicillin allergy</b>			
Penicillin V, oral	Children: 250 mg two or three times daily Adolescents and adults: 250 mg four times daily or 500 mg twice daily	10 days	Strong, high
Amoxicillin, oral	50 mg per kg once daily (maximum = 1,000 mg) Alternative: 25 mg per kg twice daily (maximum = 500 mg)	10 days	Strong, high
Penicillin G benzathine, intramuscular	< 60 lb (27 kg): 600,000 U ≥ 60 lb: 1,200,000 U	Single dose	Strong, high
<b>Patients with penicillin allergy</b>			
Cephalexin (Keflex), oral*	20 mg per kg per dose twice daily (maximum = 500 mg per dose)	10 days	Strong, high
Cefadroxil, oral*	30 mg per kg once daily (maximum = 1 g)	10 days	Strong, high
Clindamycin, oral	7 mg per kg per dose three times daily (maximum = 300 mg per dose)	10 days	Strong, moderate
Azithromycin (Zithromax), oral†	12 mg per kg once daily (maximum = 500 mg)	5 days	Strong, moderate
Clarithromycin (Biaxin), oral†	7.5 mg per kg per dose twice daily (maximum = 250 mg per dose)	10 days	Strong, moderate

\*—Avoid in individuals with immediate hypersensitivity to penicillin.

†—Resistance of group A streptococcus to these agents is well-known and varies geographically and temporally.

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**Table 3. Treatment Regimens for Chronic Carriers of Group A Streptococcus**

Drug	Dose/dosage	Duration	Recommendation strength, quality of evidence
Clindamycin, oral	20 to 30 mg per kg per day in three doses (maximum = 300 mg per dose)	10 days	Strong, high
Penicillin and rifampin, oral	Penicillin V: 50 mg per kg per day in four doses for 10 days (maximum = 2,000 mg per day) Rifampin: 20 mg per kg per day in one dose for last four days of treatment (maximum = 600 mg per day)	10 days	Strong, high
Amoxicillin/clavulanate (Augmentin), oral	40 mg amoxicillin per kg per day in three doses (maximum = 2,000 mg amoxicillin per day)	10 days	Strong, moderate
Penicillin G benzathine (intramuscular) and rifampin (oral)	Penicillin G benzathine: < 60 lb (27 kg): 600,000 U; ≥ 60 lb: 1,200,000 U Rifampin: 20 mg per kg per day in two doses (maximum = 600 mg per day)	Penicillin G benzathine: single dose Rifampin: four days	Strong, high

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Other antibiotic regimens have been shown to be substantially more effective than penicillin or amoxicillin alone in eliminating chronic streptococcal carriage. Table 3 summarizes the treatment options.

AMBER RANDEL, AFP Senior Associate Editor ■

**Answers to This Issue's CME Quiz**

- |             |                |
|-------------|----------------|
| Q1. C       | Q6. A, B, C, D |
| Q2. A, B    | Q7. A, B       |
| Q3. B, C, D | Q8. A, B, C, D |
| Q4. D       | Q9. B          |
| Q5. B       |                |

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