

## Northwestern Medicine-West Region Pharyngitis Treatment Guideline Summary

### Bacterial versus Viral Pharyngitis

- The majority of pharyngitis cases are caused by viruses
- Common viral pathogens causing pharyngitis include adenovirus, influenza virus, parainfluenza virus, rhinovirus, respiratory syncytial virus (RSV); can also be caused by coxsackievirus, echoviruses, herpes simplex, or Epstein-Barr virus (infectious mononucleosis)
- Group A Streptococcus (GAS) is the most common bacterial cause of pharyngitis (5-15% of sore throat visits in adults, 20-30% in children); data do not strongly support antibiotic treatment of pharyngitis caused by other bacteria<sup>1</sup>
- Signs and symptoms of GAS-related pharyngitis and non-streptococcal pharyngitis overlap so significantly that accurate diagnosis based solely on clinical presentation is nearly impossible<sup>1</sup>
- Common characteristics of GAS pharyngitis (but many overlap with viral symptoms)
  - Children 5-15 yo
  - Usually occurs in winter/early spring in temperate climates
  - Sudden onset of sore throat
  - Pain on swallowing
  - Fever
  - Tonsillopharyngeal erythema (+/- exudates)
  - Tender, enlarged anterior cervical lymph nodes
  - Beefy, red, swollen uvula
  - Petechiae on palate
  - Excoriated nares (especially infants)
  - Scarletiform rash
  - Headache, nausea, vomiting, abdominal pain (especially in children)
- Common symptoms that strongly suggest viral etiology of pharyngitis
  - Absence of fever
  - Conjunctivitis
  - Cough
  - Hoarseness
  - Coryza
  - Anterior stomatitis
  - Discrete intra-oral ulcerative lesions
  - Viral exanthema
  - Diarrhea
- Rapid antigen detection test (RADT) for diagnosis of GAS pharyngitis
  - Should be performed in both adults and children > 3 yo (unless older sibling with GAS) unless overt viral features present including rhinorrhea, cough, oral ulcers, and/or hoarseness
  - If positive, no back-up culture recommended
  - If RADT negative in children and adolescents, back-up throat culture is recommended to confirm
  - If RADT negative in adults, no back-up culture recommended in most cases

### Treatment of Acute Pharyngitis

#### Group A Strep Pharyngitis for Adults<sup>1</sup>

- Penicillin (adolescent dose, as well) 250mg PO QID or 500mg PO BID x 10 days
- Amoxicillin 1000mg PO Daily or 500mg PO BID x 10 days
- Penicillin-Allergic
  - Non-anaphylactic reaction: Cephalexin 500mg PO BID x 10 days
  - Anaphylactic reaction to penicillin (choose one of the following):
    - Clindamycin 300mg PO TID x 10 days (or 21mg/kg/day divided q8h; max 300mg per day)
    - Azithromycin 500mg PO Daily x 5 days (or 12 mg/kg/day; max 500mg per day)
    - Clarithromycin 250mg PO BID x 10 days

### Group A Strep Pharyngitis for Children/Adolescents

- Penicillin (children; adolescents use adult dosing) 250mg PO BID or TID x 10 days
- Amoxicillin 50mg/kg (max 1000mg) PO Daily or 25mg/kg/dose (max 500mg) PO BID x 10 days
- Penicillin-Allergic
  - Non-anaphylactic reaction (if >1 yo): Cephalexin 20mg/kg/dose (max 500mg) PO BID x 10 days
  - Anaphylactic reaction to penicillin (choose one of the following):
    - Clindamycin 7mg/kg/dose (max 300mg) PO q8h x 10 days
    - Azithromycin (if ≥2 yo) 12 mg/kg/dose (max 500mg) PO Daily x 5 days
    - Clarithromycin 7.5 mg/kg/dose (max 250mg) PO BID x 10 days

### Non-streptococcal Pharyngitis<sup>2,3</sup>

- Symptomatic treatment only
  - Gargle salt-water (1/2 teaspoon in glass of warm water) several times per day
  - Consider analgesics/antipyretics for pain or fever control
    - Acetaminophen
    - Non-steroidal anti-inflammatory agents (if no contraindications to use)
    - Acetaminophen with codeine—for severe pain
  - Additional options for Adults: May consider addition of a short course of corticosteroids to help decrease duration of throat pain, but it is recommended that steroids be preserved for the exceptional patient with severe throat pain and/or inability to swallow (e.g., prednisone 60mg po x 1 or 2 days or dexamethasone 10mg IM or PO x 1)

### **Patients who may warrant antibiotic therapy or further investigation of illness despite negative GAS evaluation<sup>2</sup>:**

- Systemically very ill
- Symptoms/signs suggestive of serious illness or complications (pneumonia, mastoiditis, peritonsillar abscess or cellulitis, intraorbital and intracranial complications)
- Previous comorbidity putting patient at risk for serious complications (significant heart, lung, renal, liver, or neuromuscular dz, immunosuppression, cystic fibrosis, and young children born prematurely)
- Patients older than 65 yo with acute cough and two or more of the following, or older than 80 yo with acute cough and one or more of the following:
  - Hospitalization in last year
  - DM
  - CHF
  - Current use of oral glucocorticoids

### **Patient Education<sup>2,4</sup>**

- In viral pharyngitis, antibiotics will not help the infection go away and could increase risk of resistant infections in the future, as well as increased risk of side effects such as diarrhea or upset stomach
- Symptoms usually go away in about 10 days
- Contact your health care provider if symptoms worsen or do not improve after 2 weeks

#### References:

- 1) Shulman ST, et al. Clinical practice guideline for diagnosis and management of group A Streptococcal pharyngitis: 2012 Update by the Infectious Diseases Society of America. *CID* 2012; doi: 10.1093/cid/cis629. Accessed online at: <http://cid.oxfordjournals.org/content/early/2012/09/06/cid.cis629.full.pdf+html> on May 20, 2014.
- 2) Centre for Clinical Practice. Respiratory tract infections-antibiotic prescribing. Prescribing of antibiotics for self-limiting respiratory tract infections in adults and children in primary care. London (UK): National Institute for Health and Clinical Excellence (NICE); 2008 Jul. 121 p. (Clinical guideline; no. 69).
- 3) "Symptomatic Treatment of Acute Pharyngitis in Adults." UpToDate Clinical Database. UpToDate, Inc. 2014, release:22.8-C22.161. Wolters Kluwer Health.
- 4) Medline Plus website. US National Library of Medicine, National Institutes of Health. Page last updated May 16, 2014; accessed May 20, 2014 at <http://www.nlm.nih.gov/medlineplus/ency/article/001392.htm> .