For more information or to provide feedback on this or any other decision support tool, email certifiedpractice@bccnp.ca

ADULT PHARYNGITIS (SORE THROAT)

DEFINITION

Inflammation or infection of the mucus membranes of the pharynx. It may also affect the palatine tonsils.

POTENTIAL CAUSES

Infectious

Viruses

- Adenovirus
- Influenza
- Parainfluenza virus
- Epstein-Barr
- Coronavirus
- Rhinovirus
- Enterovirus
- Respiratory synctial virus
- Metapneumovirus
- Herpes simplex virus

Bacterial

- Group A beta-haemolytic strep
- Group C and G streptococci
- Chlamydia pneumoniae
- Diphtheria
- Mycoplasma pneumonia
- *Neisseria gonorrhea* or *chlamydia trachomatis (*related to sexual activity)

Fungi

- *Candida albicans* (immunocompromised)

Non-infectious

- Allergic rhinitis
- Sinusitis with post nasal drip
- Mouth breathing
- Trauma
- GERD (gastroesophageal reflux disease)

PREDISPOSING RISK FACTORS

- Previous episodes of pharyngitis or tonsillitis
- Smoking, exposure to cigarette smoke
- Overcrowding
- Immunocompromised
- Steroids, oral or inhaled
- Diabetes mellitus
- Oral sex

TYPICAL FINDINGS OF PHARYNGITIS

Note: Always consider the potential for epiglottitis and airway obstruction when a severely sore throat is out of proportion to the findings of the oropharyngeal exam.

Bacterial

History

- Abrupt onset of sore throat
- Pain with swallowing
- Absence of cough
- Fever or chills
- Malaise
- Headache
- Anorexia
- May have nausea, vomiting and abdominal pain

Physical Assessment

- Fever
- Pulse elevated
- Client appears ill
- Posterior pharynx red and edematous
- Tonsils enlarged, may be asymmetric

- Purulent exudate may be present
- Tonsillar and anterior cervical nodes may be enlarged and tender
- Erythematous "sandpaper" rash of scarlet fever (may be present with streptococcal infection)
- Liver/spleen enlargement +/- tenderness (e.g., mononucleosis)

Viral

History

- Slow progressive onset of sore throat
- Mild malaise
- Cough
- Nasal congestion

Physical Assessment

- Temperature elevated
- Posterior pharynx red and swollen
- Purulent exudate may be present
- Tonsillar and anterior cervical nodes may be enlarged and tender
- Petechiae or purple colour on palate (mononucleosis)
- Vesicles (if herpes)

Non-infectious

- Slow progressive onset of sore throat
- Mild malaise
- Cough
- Persistent, recurrent
- Pain on swallowing
- Posterior pharynx red and swollen
- Tonsillar and anterior cervical nodes may be enlarged and tender
- Exudate may be present

Note: It is often impossible to distinguish clinically between bacterial and viral pharyngitis. Most pharyngitis is due to viruses (up to 90% in the adult population) and does not require treatment with antibiotics. For this reason it is important to utilize a sore throat score and diagnostic testing as available.

Criteria	Points
Temperature > 38' Celsius	1
Absence of cough	1
Swollen, tender anterior cervical nodes	1
Tonsillar swelling or exudates	1
Age 3-14 years	1
Age 15-44 years	0
Age 45 years and over	-1

Total Score	Risk of Streptococcal infection (%)	Suggested Management
-1 to 1	1-10 %	No culture or antibiotic required
2-3	11-35%	Perform culture or rapid strep test. Treat only if test is +
4 or more	51-53%	Start antibiotic therapy if patient situation warrants (e.g., high fever or clinically unwell) If culture or rapid strep test performed and negative, discontinue antibiotic

Note: Treatment with antibiotics may be warranted regardless of the score if there are concerns such as:

- household contact with streptococcal infection,
- a community epidemic of streptococcal infection,
- a client history of rheumatic fever, valvular heart disease, or immunosuppression, or
- a population in which rheumatic fever remains a problem

Geriatric considerations:

Treatment may also be warranted if client is 65+ years with acute cough and 2 or more of the following criteria, or 80+ years with acute cough and one or more of:

- Hospitalization in the past year
- Diabetes Mellitus
- Congestive Heart Failure
- On glucocorticoids.

Diagnostic Tests

- Throat swab for culture and sensitivity (C&S)
- Rapid strep test (where available)

MANAGEMENT AND INTERVENTIONS

Goals of Treatment

- Eradicate infection
- Prevent complications
- Prevent spread of group A streptococcus

Non-pharmacologic interventions

- Bed rest during febrile phase
- Adequate oral intake of fluids
- Avoidance of irritants
- Gargling with warm saline (1 tsp. in 1 cup warm water)

Pharmacological Interventions

- Analgesics for mild to moderate pain:
  - acetaminophen 325mg, 1-2 tabs po q4-6h prn, or
  - ibuprofen 200mg, 1-2 tabs po q4-6h prn

- Treat with oral antibiotics if streptococcal infection is suspected:
  - Penicillin VK 300 - 600 mg po tid for 10 days

- For clients with penicillin allergy or requiring a suspension (if pen V suspension not available):
  - Cephalexin 500 mg po BID for 10 days (DO NOT USE IF CLIENT HAS A SEVERE ANAPHYLACTIC REACTION TO PENICILLIN)

    OR

  - Azithromycin 500 mg po daily for 3 days

Pregnant and Breastfeeding Women

- Acetaminophen, penicillin VK, cephalexin and azithromycin may be used as listed above.
- DO NOT use ibuprofen in pregnant patients

If the infection has been determined to be due to chlamydia or gonorrhea, please refer to the appropriate STI DST.

POTENTIAL COMPLICATIONS

- Rheumatic fever (group A strep)

- Acute Glomerulonephritis (group A strep)
- Peritonsillar abscess
- Epiglottitis
- Retropharyngeal abscess
- Otitis media
- Sinusitis

CLIENT EDUCATION AND DISCHARGE INFORMATION

- Gargle frequently with warm salt water (1 tsp. in 1 cup warm water)
- Increase room humidity
- Eat soft bland foods

MONITORING AND FOLLOW UP

- Return to clinic if not improved in 24-48 hours

CONSULTATION AND/OR REFERRAL

- A consultation with a physician or nurse practitioner may be necessary if condition is recurrent or persistent or an undiagnosed underlying pathology is suspected.
- An immunocompromised client, or an unusual presentation of candidiasis, should be referred promptly to a physician or nurse practitioner.

DOCUMENTATION

- As per agency policy

REFERENCES

More recent editions of any of the items in the Reference List may have been published since this DST was published. If you have a newer version, please use it.

Anti-Infective Review Panel. (2012). *Anti-infective guidelines for community-acquired infections*. Toronto, ON: MUMS Guideline Clearinghouse.

Blondel-Hill, E., & Fryters, S. (2012). *Bugs and drugs*: *An antimicrobial infectious diseases reference.* Edmonton, AB: Alberta Health Services.

Cash, J. C., & Glass, C. A. (Eds.). (2014). *Family practice guidelines* (3rd ed.). New York, NY: Springer.

Canadian Pharmacists Association. (2014). *Therapeutic choices* (7th ed.). Ottawa, ON: Author.

Canadian Pharmacists Association. (2014). *Therapeutic choices for minor ailments*. Ottawa, ON: Author.

Carillo-Marquez, M. A. (2015). *Bacterial pharyngitis.* Retrieved from http://emedicine.medscape.com/article/225243-overview

Chan, P. D., & Johnson, M. T. (2010). *Treatment guidelines for medicine and primary care*. Blue Jay, CA: Current Clinical Strategies Publishing.

Chen, A., & Tran, C. (2011). *Comprehensive medical reference and review for MCCQE and USMLE II. Toronto notes form medical students.* Toronto: Toronto Notes for Medical Students, Inc.

DynaMed. (2016, March 25). *Antibiotics for streptococcal pharyngitis*.

DynaMed. (2016, March 25). *Streptococcal pharyngitis*.

DynaMed. (2016, March 25). *Pharyngitis*.

Gore, J. M. (2013). Acute pharyngitis. *JAAPA: Journal of the American Academy of Physician Assistants, 26*(2), 57-58.

Jensen, B., & Regier, L. D. (Eds). (2014). *RxFiles: Drug comparison charts* (10th ed.). Saskatoon, SK: RxFiles

National Institute for Health and Clinical Excellence (NICE). (2008, July). *Respiratory tract infections – antibiotic prescribing: Prescribing of antibiotics for self-limiting respiratory tract infections in adults and children in primary care.* Manchester, UK: Author. Retrieved from https://www.nice.org.uk/guidance/CG69

Shepherd, A. B. (2013). Assessment and management of acute sore throat. *Nurse Prescribing, 11*(11), 549-553.

Shulman, S.T., Bisno, A.L., Clegg, H.W., Gerber, M.A., Kaplan, E.L., Lee, G.,…Van Beneden, C. (2012). Clinical practice guideline for the diagnosis and management of group A streptococcal pharyngitis: 2012 update by the Infectious Diseases Society of America. *Clinical Infectious Diseases. 55*(10), e86-e102. Retrieved from: http://cid.oxfordjournals.org/content/55/10/e86.long

University of Michigan Health System. (2013, May). *Pharyngitis*: *Guidelines for clinical care: Ambulatory* (Rev.). Ann Arbor, MI: Author. Retrieved from http://www.med.umich.edu/1info/fhp/practiceguides/pharyngitis/pharyn.pdf