Care and Treatment Plan: Pharyngitis – *Adult and Pediatric*

Definition

A painful condition of the oropharynx with inflammation or infection of the mucus membranes of the pharynx and possibly the palatine tonsils.

The peak prevalence is found in children less than 5 years.

Registered Nurses with **Remote Nursing** and **RN First Call** Certified Practice (RN(C)) designation are authorized to manage, diagnose, and treat adults or children who are **1 year and older** with pharyngitis.

Management and Intervention

Bacterial

Goals of Treatment

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

Additional Pediatric Considerations

- Control pain and fever
- Rapid reduction in infectivity
- Prevent spread of Group A Streptococcus
- Decrease antibiotic resistance

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)

Additional Pediatric Considerations

- Increase room humidity

Pharmacologic Interventions: Adults

- 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 600mg PO BID or 300mg PO TID for 10 days
- For clients with penicillin allergy or requiring a suspension (if pen V suspension not available):
  - Cephalexin 500mg PO BID for 10 days (*DO NOT USE IF CLIENT HAS A SEVERE ANAPHYLACTIC REACTION TO PENICILLIN*), or
  - Azithromycin 500mg PO daily for 3 days

Pharmacological Interventions: Pediatric

Note: All doses must be calculated by weight up until 12-years of age. Pediatric doses should not exceed recommended adult doses.

- To relieve pain:
  - Acetaminophen 10-15mg/kg, PO q4-6h prn; maximum dose 75mg/kg/24hr, or a total of 4,000mg/24hr, whichever is less, or
  - Ibuprofen 5-10mg/kg, PO q6-8h PRN; maximum dose 40mg/kg/24hr
- Pen VK 40mg/kg/day divided BID for 10 days; Amoxicillin is no longer recommended
- In case of unavailability of the previously listed antibiotics, or allergies to the above antibiotics:
  - Cephalexin 40 mg/kg/24hr divided BID for 10 days. (DO NOT USE if patient has a severe anaphylactic reaction to penicillin), or
  - Azithromycin 20mg/kg PO daily for 3 days (Maximum dose 500mg/day)

Pharmacological Interventions: Pregnant and Breastfeeding Women

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

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

Viral

Goals of Treatment

- Relieve symptoms
- Supportive care

Non-pharmacologic Interventions

- Rest
- Increase oral fluids
- Avoid irritants
- Warm saline gargles QID (1 tsp. of salt in 1 cup of warm water)

Pharmacological Interventions: Pediatrics

Note: All doses must be calculated by weight up until age 12. Pediatric doses should not exceed recommended adult doses.

- To relieve pain:
  - Acetaminophen 10-15 mg/kg, po q4-6h PRN; maximum dose 75mg/kg/24hr or a total of 4,000mg/24hr, whichever is less, or
  - Ibuprofen 5-10mg/kg, PO q6-8h PRN; maximum dose 40mg/kg/24hr

Potential Complications

- Rheumatic fever (Group A strep)
- Acute Glomerulonephritis (Group A strep)
- Peritonsillar abscess
- Epiglottitis
- Retropharyngeal abscess
- Otitis media

- Sinusitis

Additional Pediatric Considerations

- Splenomegaly (Epstein Barr Virus or Infectious Mononucleosis)
- Pneumonia
- Bacterial meningitis

Client Education/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 References List may have been published since this DST was published. If you have a newer version, please use it.

Aaron K, Cooper TE, Warner L, Burton MJ. Ear drops for the removal of ear wax. Cochrane ENT Group, ed. Cochrane Database of Systematic Reviews. July 2018. doi:10.1002/14651858.CD012171.pub2

Acute otitis media: Update on diagnosis and treatment. (2013). *Consultant, 53*(5), 352-353.

Alberta Medical Association. (2008). Guideline for the diagnosis and management of acute otitis media. *Toward Optimized Practice.* Edmonton, AB: TOP Alberta Doctors.

American Academy of Pediatrics. (2013). Clinical practice guideline: The diagnosis and management of acute otitis media. *Pediatrics, 131*(3), e964-e999.

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

Ball, J. W., Dains, J. E., Flynn, J. A., Solomon, B. S., & Stewart, R. W. (Eds.). (2015). *Seidel's guide to physical examination* (8th ed.). St. Louis, MO: Elsevier.

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

Canadian Dental Association. Antimicrobial treatment options in the management of odontogenic infections.

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

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

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

Carillo-Marquez, M. A. (2015). *Bacterial pharyngitis.*

Carter, S., & Laird, C. (2005). 10 assessment and care of ENT problems. *Emergency Medicine Journal, 22*, 128-139. doi: 10.1136/emj.2004.021642.

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

Centers for Disease Control and Prevention. (CDC). (2017). Candida infections of the mouth, throat, and esophagus. CDC.

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

Chen, Y. A., & Tran, C. (Eds.). (2011). *The Toronto notes 2011: Comprehensive medical reference and review for the Medical Council of Canada Qualifying Exam Part 1 and the United States Medical Licensing Exam Step 2* (27th ed.). Toronto, ON: Toronto Notes for Medical Students.

Chow, A.W. (2016). Complications, diagnosis, and treatment of odontogenic infections. UpToDate.

Chow, A. W. (2015). Epidemiology, pathogenesis, and clinical manifestations of odontogenic infections. *UptoDate*

Dains, J. E., Baumann, L. C., & Scheibel, P. (2012). *Advanced health assessment and clinical diagnosis in primary care* (4th ed.). St. Louis, MO: Elsevier Mosby.

DynaMed. (2015, March 31). *Acute apical dental abscess*.

DynaMed. (2015, August 17). *Acute otitis media (AOM)*.

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

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

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

Estes, M. E. Z. (2014). *Health assessment and physical examination* (5th ed.). Clifton Park, NY: Cengage Learning.

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

Gould, J. M. (2015, April 22). *Dental abscess*.

Gregoire, C. (2010). How are odontogenic infections best managed? *Journal of the Canadian Dental Association.76* (a37).

Guidelines and Protocols Advisory Committee. (2010). *Otitis media: Acute otitis media (AOM) and otitis media with effusion (OME)*

Harmes, K. M., Blackwood, R. A., Burrows, H. L., Cooke, J. M., Harrison, R., & Passamani, P. P. (2013). Otitis media: Diagnosis and treatment. *American Family Physician, 88*(7), 435-440.

Hersh, A. L., Jackson, M., & Hicks, L. A. (2013). Principles of judicious antibiotic prescribing for upper respiratory tract infections in pediatrics. *Pediatrics, 132*(6), 1146-1154.

Hirst, S., & Neill, S. (2013). Treatment of acute otitis media in childhood. *Practice Nursing*, *24*(8), 407-410

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

Lieberthal, A.S. et al., American Academy of Pediatrics. (2013). Clinical practice guideline: The diagnosis and management of acute otitis media. *Pediatrics, 131*(3), e964-e999.

Limb, C. J., Lustig, L. R., & Klein, J. O. (2014). Acute otitis media in adults (suppurative and serous). *UptoDate.*

McCarter, D. F., Courtney, U., & Pollart, S. M. (2007). Cerumen impaction. *American Family Physician, 75*(10), 1523-1528.

McWilliams, C. J., & Goldman, R. D. (2011). Update on acute otitis media in children younger than 2 years of age. *Canadian Family Physician, 57*(11), 1283-1285.

Michaudet C, Malaty J. Cerumen impaction: diagnosis and management. American Family Physician. 2018;98(8):7.

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.

Peng, L. F. (2015, February 27). *Dental infections in emergency medicine*.

Porter, R. S., & Kaplan, J. L. (2011). Section 5: Ear, nose, throat and dental disorders. In *The Merck Manual* (19th ed.), (p. 411-534). Whitehouse Station, NJ: Merck Sharp & Dohme Corp.

Ramakrishnan, K., Sparks, R. A., & Berryhill, W. E. (2007). Diagnosis and treatment of otitis media. *American Family Physician, 76*(11), 1650-1658.

Sawyer, S. S. (2014). *Pediatric physical examination and health assessment*. Sudbury, MA: Jones & Bartlett Learning

Schwartz SR, Magit AE, Rosenfeld RM, et al. Cerumen impaction: an updated guideline from the AAO-HNSF. Otolaryngol Head Neck Surg. 2017;156(1_suppl):S1-S29. doi:10.1177/0194599816671491

Stephen, T. C., Skillen, D. L., Day, R. A., & Bickley L. S. (2010). *Canadian Bates' guide to health assessment for nurses.* Philadelphia, PA: Lippincott, Williams & Wilkins.

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.

Substance Abuse and Mental Health Services Administration (SAMHSA). 2017. *Alcohol,Tobacco, and Other Drugs*.

University of Michigan Health System. (2013, May). *Pharyngitis: Guidelines for clinical care: Ambulatory* (Rev.). Ann Arbor, MI: Author.

Venekamp, R. P., Sanders, S. L., Glasziou, P. P., Del Mar, C. B., Rovers, M. M. (2015). Antibiotics for acute otitis media in children. *The Cochrane Database of Systematic Reviews,* (6). Doi: 10.1002/14651858.CD000219.pub4.