

Opinion

**\*Corresponding author**  
**Sydney Correia Leao, MD**  
 Pathology Assistant  
 Federal University of São Paulo;  
 Associated Researcher  
 Group of Molecular Anatomy  
 Federal University of Sergipe  
 São Paulo, Brazil  
 E-mail: [sydneyleao@hotmail.com](mailto:sydneyleao@hotmail.com)

Volume 1 : Issue 1  
 Article Ref. #: 1000OTLOJ1105

**Article History**  
 Received: November 17<sup>th</sup>, 2015  
 Accepted: November 19<sup>th</sup>, 2015  
 Published: November 19<sup>th</sup>, 2015

**Citation**  
 Leao SC. Pharyngotonsillitis: a quick review. *Otolaryngol Open J.* 2015; 1(1): 18-19. doi: [10.17140/OTLOJ-1-105](https://doi.org/10.17140/OTLOJ-1-105)

**Copyright**  
 ©2015 Leao SC. This is an open access article distributed under the Creative Commons Attribution 4.0 International License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Pharyngotonsillitis: A Quick Review

**Sydney Correia Leao\***

*Pathology Assistant, Federal University of São Paulo; Associated Researcher, Group of Molecular Anatomy, Federal University of Sergipe, São Paulo, Brazil*

Tonsils and adenoids are part of the lymphoid system that surrounds the pharynx and are involved in humoral and cellular immunity. The tonsils are incomplete encapsulated aggregates of lymphoid nodules, arranged below and in contact with the epithelium of the initial portions of the digestive and respiratory tract. According to their location, they can be called: palatine, lingual and pharyngeal. The tonsils are bilateral and are located at the boundary between the oral cavity and oropharynx.<sup>1</sup> Because of its location, these tonsils come into constant contact with inhaled or swallowed microorganisms, becoming targets for infection.

Pharyngotonsillitis (PT) or Sore Throat (ST) is a self-limiting infection usually confined to the posterior pharynx, tonsils, soft palate and posterior lymph nodes of the lymphatic ring of Waldeyer that drain into the posterior cervical region. The STs are transmitted from person to person, and the nasopharynx and oropharynx are the main foci of microorganisms colonization.<sup>2</sup>

The rate of acute PT incidence was recorded in a study carried out in Portugal by Simões, et al.<sup>3</sup> The incidence of acute sore throat was 3,651.1/105 for the age group of 0 to 4 years; and 3,440.3/105 for the age group of 5 to 9 years and 2,020/105 for the age group of 10 to 14 years.

Sore throats are common in children, and in most cases they are viral. The most common bacterial agent is  $\beta$ -hemolytic Group A Streptococcus (GAS) corresponding to 15% to 20% of cases in children and adolescents; although there are reports of an incidence not greater than 10% in general population.<sup>4-6</sup>

However, some studies registered non-group A streptococcal (non-GAS) PT. In cultures of pharyngeal exudate, it was found other serogroups of  $\beta$ -hemolytic streptococcus, such as B, C, F and G and there are reports of pharyngitis caused by these groups, especially the C and G.<sup>7-9</sup>

Streptococcal PT, if not adequately treated, can lead to non-suppurative complications such as rheumatic fever and glomerulonephritis, with high costs and high morbidity especially in developing countries such as Brazil.<sup>10</sup> So the importance of knowing, studying and treating this disease better, is sometimes neglected.

REFERENCES

- Gartner LP, Hiatt JL. Color histology treated. 1<sup>st</sup> ed. Rio de Janeiro: Guanabara Koogan SA, 1999.
- Sih TM, Chinski A, Eavy R, Godinho R. VI Manual of Pediatric Otorhinolaryngology IAPO São Paulo: Editora RR Donnelley Graphics and Ltda, 2007: 265.
- Simões JÁ, Falcão IM, Dias CM. Acute tonsillitis incidence in the population under observation by the Network “Doctors Sentinel” in 1998. *Rev Port Clin General*, 2002; 18: 99-108.

4. Eizenberg B. The Management of patients with acute pharyngitis. *J Pediatr (Rio J)*. 2005; 81: 1-2.
5. Chowdhury, PK, Mazumder, PK, Khan NM, Das RK. Anti-biogram in acute pharyngitis: a study of 137 children cases. *Dinajpur Med Col J*. 2008.
6. Barbosa PJB, Muller RE, Latado AL, et.al. Brazilian Guidelines for Diagnosis, Treatment and Prevention of Rheumatic Fever Brazilian Society of Cardiology, the Brazilian Society of Pediatrics and the Brazilian Society of Rheumatology. *Arq Bras Cardiol*. 2009; 93(3 Suppl 4): 1-18.
7. Tiemstra J, Miranda RLF. Role of non-group a streptococci in acute pharyngitis. *JABFM*. 2009; 22(6): 663-669. doi: [10.3122/jabfm.2009.06.090035](https://doi.org/10.3122/jabfm.2009.06.090035)
8. Brandt ER, Sriprakash KS, Hobb RI, et al. New multi-determinant strategy for a group A streptococcal vaccine designed for the Australian Aboriginal population. *Nat Med*. 2000; 6(4): 455-459. doi: [10.1038/74719](https://doi.org/10.1038/74719)
9. Fretzayas A, Moustaki M, Kitsiou S, Nychtari G, Nicolaidou P. The clinical pattern of group C streptococcal pharyngitis in children. *J Infect Chemother*. 2009; 15: 228-232. doi: [10.1007/s10156-009-0694-8](https://doi.org/10.1007/s10156-009-0694-8)
10. Koneman EW, Allen SD, Janda WM, Schreckenberger PC, Winn WC. Microbiological diagnosis. 5<sup>th</sup> ed. MEDSI Publisher Medical and Scientific Ltda. Rio de Janeiro-RJ, 2001.