

CHRONIC TONSILLITIS: ETIOLOGY, PATHOGENESIS, CLINICAL FEATURES AND MODERN MANAGEMENT**Salimova Nazokat Faxriddin kizi**

Asian International University, Bukhara, Uzbekistan

Abstract

Chronic tonsillitis is a persistent inflammatory disease of the palatine tonsils characterized by recurrent infections, structural alterations of tonsillar crypts, and long-term inflammatory changes. It affects both children and adults and remains a common cause of morbidity in otolaryngology practice. The condition is associated with repeated episodes of acute tonsillitis, halitosis, dysphagia, and potential systemic complications. This paper discusses the etiology, pathogenesis, clinical manifestations, diagnostic approaches, complications, and modern management strategies of chronic tonsillitis.

Introduction

The palatine tonsils are components of Waldeyer's lymphatic ring and play an essential role in mucosal immunity. They function as immunological barriers against inhaled and ingested pathogens. However, repeated infections may impair their protective function and lead to chronic inflammatory changes. Chronic tonsillitis develops as a result of persistent bacterial colonization and recurrent acute infections, resulting in structural damage and fibrosis of the tonsillar tissue.

Etiology

Chronic tonsillitis most commonly develops after recurrent episodes of acute tonsillitis. The principal bacterial pathogens include *Streptococcus pyogenes* (Group A beta-hemolytic streptococcus), *Staphylococcus aureus*, *Haemophilus influenzae*, and various anaerobic bacteria. Viral infections may contribute to the initial inflammatory process.

Predisposing factors include frequent upper respiratory tract infections, poor oral hygiene, allergic conditions, environmental pollution, immunodeficiency, and genetic susceptibility. Biofilm formation within tonsillar crypts significantly contributes to bacterial persistence and resistance to antibiotic therapy.

Pathogenesis

The pathogenesis of chronic tonsillitis involves repeated inflammatory responses leading to fibrosis, crypt obstruction, and accumulation of desquamated epithelial cells and debris. Obstructed crypts provide a favorable environment for bacterial growth and biofilm formation. Over time, lymphoid tissue undergoes hypertrophy or atrophy, reducing its immunological function.

Biofilms play a crucial role in chronic inflammation. They protect bacteria from host immune responses and antibiotics, contributing to recurrent infections and treatment failure.

Clinical Manifestations

Patients with chronic tonsillitis often present with persistent sore throat, discomfort during swallowing, halitosis, enlarged or hyperemic tonsils, tonsillolith formation, and cervical lymphadenopathy. Symptoms are usually milder than acute tonsillitis but more prolonged.

Recurrent acute exacerbations may occur several times per year. Systemic symptoms such as fatigue and low-grade fever may also be observed. In children, hypertrophic tonsils may

contribute to obstructive sleep apnea and speech difficulties.

Diagnosis

Diagnosis is primarily clinical and based on medical history and physical examination. Diagnostic criteria for recurrent tonsillitis include seven or more episodes in one year, five episodes per year for two consecutive years, or three episodes annually for three consecutive years.

Laboratory investigations may include throat swab culture, complete blood count, and C-reactive protein measurement. Imaging studies are reserved for complicated cases, such as suspected peritonsillar abscess.

Complications

If left untreated, chronic tonsillitis may lead to local and systemic complications. Local complications include peritonsillar abscess, otitis media, sinusitis, and cervical lymphadenitis. Systemic complications may include rheumatic fever and post-streptococcal glomerulonephritis.

Chronic inflammation may also negatively affect quality of life due to persistent discomfort and recurrent infections.

Management

Conservative treatment includes antibiotic therapy guided by culture results, anti-inflammatory medications, antiseptic gargles, and immunomodulatory therapy. However, conservative measures often provide temporary relief.

Tonsillectomy remains the definitive treatment for patients with recurrent or complicated chronic tonsillitis. Indications for surgery include frequent infections meeting clinical criteria, history of peritonsillar abscess, obstructive symptoms, and suspicion of malignancy.

Modern surgical techniques include cold dissection, electrocautery, coblation, and laser tonsillectomy. Postoperative outcomes are generally favorable, with significant improvement in patient quality of life.

Conclusion

Chronic tonsillitis is a multifactorial inflammatory condition resulting from recurrent infections and persistent bacterial colonization. Biofilm formation plays a central role in disease persistence. While conservative management may alleviate symptoms, tonsillectomy remains the most effective treatment in recurrent cases. Early diagnosis and appropriate management are essential to prevent complications and improve patient outcomes.

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