Int. j. adv. multidisc. res. stud. 2026; 6(3):881-882

Received: 05-04-2026
Accepted: 15-05-2026

International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

Management of Pharyngitis During Pregnancy: Etiology, Safety, and Clinical Considerations

[1] Kamlesh Dubey, [2] Neena Chuni

[1] Associate Professor & HOD, Department of Otorhinolaryngology, Manipal University College Malaysia, Melaka, Malaysia
[2] Professor, Department of Obstetrics & Gynecology, Manipal University College Malaysia, Melaka, Malaysia

DOI: https://doi.org/10.62225/2583049X.2026.6.3.6368
Corresponding Author: **Kamlesh Dubey**

Abstract

Pharyngitis, or sore throat, is a common complaint during pregnancy, often causing significant maternal discomfort. While most cases are viral and self-limiting, the physiological changes of pregnancy—including immunological shifts and hormonal influences on the mucosa—require a tailored approach to diagnosis and management. This article reviews the primary etiologies of sore throat in pregnant women, the safety profiles of pharmacological interventions, and non-pharmacological strategies to alleviate symptoms while ensuring fetal safety.

Keywords: Pharyngitis, Etiology, Rapid Antigen Detection Tests (RADT)

Introduction

Pregnancy is characterized by a unique physiological state involving increased plasma volume and elevated levels of estrogen and progesterone. These hormonal shifts inhibit acetylcholinesterase, leading to cholinergic-mediated vascular engorgement and "boggy" mucus membranes [1, 9]. This mucosal edema often manifests as pregnancy rhinitis, which predisposes the upper respiratory tract to irritation and secondary infections [9]. Furthermore, pregnant women are particularly vulnerable to respiratory pathogens due to altered immunological responses, facing higher risks of infection and systemic complications [7, 8].

Etiology of Sore Throat in Pregnancy

The causes of sore throat in pregnant women are largely similar to those in the general population, though pregnancy-specific factors can exacerbate symptoms.

1. Infectious Pharyngitis
   - Viral Origin**:** Approximately 50% to 80% of pharyngitis cases are viral, involving pathogens such as rhinovirus, adenovirus, and seasonal influenza (StatPearls, 2024). Influenza infection during pregnancy is specifically linked to increased risks of preterm birth and low birthweight [7].
   - Bacterial Origin**:** Group A beta-haemolytic streptococcus (GAS) is the most clinically significant bacterial cause [8]. Recurrent tonsillopharyngitis may also be caused by the *Streptococcus anginosus* group, which can thrive due to shifts in the oral microbiota during pregnancy [10].
2. Non-Infectious Factors
   - Gastroesophageal Reflux (GERD): Pregnancy-induced relaxation of the lower esophageal sphincter contributes significantly to pharyngeal irritation (Kishanrao, 2023). Reflux is a multifactorial condition where gastric contents irritate the oesophagus and throat, often causing a "globus" sensation or chronic throat clearing [11, 12].
   - Environmental Irritants: Dry air and seasonal allergens can exacerbate mucosal inflammation, especially when combined with pregnancy-related nasal congestion [6, 9].

Diagnostic Approach

Clinicians must differentiate between viral and bacterial causes to prevent unnecessary antibiotic use.

- Rapid Antigen Detection Tests (RADT): These are highly specific for GAS, with sensitivities ranging from 70% to 90% [8].

- Clinical Red Flags: Symptoms such as stridor, high fever, or significant dyspnoea warrant immediate investigation for more severe conditions like pneumonia or airway obstruction [2].

Management and Safety of Pharmacotherapy

Managing pharyngitis in this population requires balancing maternal relief with fetal safety. High rates of over the counter (OTC) medicine use (80%–90%) during pregnancy necessitate accessible safety information for patients [4].

Pharmacological Interventions

Medication Category	Safety Status in Pregnancy	Clinical Notes
Analgesics	Paracetamol (Acetaminophen)	First-line therapy for pain and fever [2].
NSAIDs	Avoid in 3rd Trimester	Risk of premature closure of the ductus arteriosus [4].
Antibiotics (Beta-lactams)	Amoxicillin & Cephalosporins	Considered safe first-line treatments for confirmed GAS [3, 5].
Antibiotics (Macrolides)	Azithromycin	Used as an alternative for penicillin-allergic patients, though some resistance is noted [3, 8].

Non-Pharmacological Strategies

1. Hydration: Drinking 6-8 glasses of water daily keeps mucus thin and reduces irritation [2].
2. Humidification and Steam**:** Using a vaporizer or steam inhalation can moisturize dry nasal passages and aid mucus clearance, although clinical evidence varies [9].
3. Saline Gargles: A simple, safe remedy to reduce mucosal edema and provide immediate symptomatic relief [8].

Conclusion

Sore throat during pregnancy often arises from viral infections or physiological changes like reflux. While symptomatic relief is the primary goal, identifying bacterial pathogens is crucial to prevent complications like rheumatic fever. Early vaccination against respiratory viruses like influenza is strongly recommended to protect both maternal and fetal health.

References

1. Harris J, Sheiner E. Does an Upper Respiratory Tract Infection During Pregnancy Affect Perinatal Outcomes? A Literature Review. Current Infectious Disease Reports. 2013; 15(2):143-147. Doi: https://doi.org/10.1007/s11908-013-0320-x
2. Kishanrao S. Epidemiology & Management of Cough in Smaller Settings-An Indian Case Study. Journal of Quality in Health Care & Economics. 2023; 6(1):1-13. Doi: https://doi.org/10.23880/jqhe-16000331
3. Laibl V, Sheffield J. The Management of Respiratory Infections During Pregnancy. Immunology and Allergy Clinics of North America. 2006; 26(1):155-172. Doi: https://doi.org/10.1016/j.iac.2005.11.003
4. MediMama Development Team. Development and Launch of a Dutch Mobile App (MediMama) on Over-the-Counter Medication Safety During Pregnancy and Breastfeeding: Development and Usability Study. JMIR mHealth and uHealth. 2026; 14(1):e85948. https://mhealth.jmir.org/2026/1/e85948
5. Julia Lloyd, Kathleen Lau, Cindy San, Victor Leung, Colin Lee. Characterizing the Use of High-Dose Amoxicillin for the Treatment of Bacteremia. PMC Journal, 2026. https://pmc.ncbi.nlm.nih.gov/articles/PMC12845038/
6. Chiara Premuda, Martina Santambrogio, Sofia Misuraca, Gianmarco Putti, Filippo Maraz, Andrea Sarassi, *et al*. Nonpharmacological interventions for managing infections in chronic respiratory diseases: A comprehensive overview. Breathe (Sheff), Jan 27, 2026; 22(1):250058 https://pmc.ncbi.nlm.nih.gov/articles/PMC12839471/
7. Xueyan Zhang, Balasubramani GK, Helen Eleni Aslanidou D'Agostino, Hui Liu, Anne-Marie Rick. The impact of maternal influenza infection and vaccination during pregnancy on birth outcomes. Pediatr Infect Dis J, April 20, 2026. https://pmc.ncbi.nlm.nih.gov/articles/PMC13094747/
8. StatPearls. Pharyngitis. StatPearls Publishing, 2024. https://www.ncbi.nlm.nih.gov/books/NBK519550/
9. Sherlie VS, Varghese A. ENT Changes of Pregnancy and its Management. Indian Journal of Otolaryngology and Head & Neck Surgery. 2012; 66(1):6-9. Doi: https://doi.org/10.1007/s12070-011-0376-6
10. Vasil Boyanov, Raina Gergova, Ivo Sirakov. A Complicated Microbiology Diagnosis and Treatment of Tonsillopharyngitis in Pregnancy: Case Reports in Medicine Volume, 2025, Article ID 5675549. https://pmc.ncbi.nlm.nih.gov/articles/PMC12479148/
11. Estello Nap Hill, Gunisha Kalra, Sarvee Moosavi. Gastroesophageal reflux disease: Diagnosis and management in a primary care setting. British Columbia Medical Journal, March 2026; 68(2):62-68. https://bcmj.org/articles/gastroesophageal-reflux-disease-diagnosis-and-management-primary-care-setting
12. Yim Chiou, Ongkasuwan. Pathophysiological and nutritional aspects in the etiology and management of gastroesophageal reflux disease. British Journal of Nutrition, 2025. https://www.cambridge.org/core/journals/british-journal-of-nutrition/article/pathophysiological-and-nutritional-aspects-in-the-etiology-and-management-of-gastroesophageal-reflux-disease/F28711438E1C26106D3FC0C0CC890E48