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Case Report

Monitoring and Evaluation of Syphilitic Tonsillitis

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ABSTRACT

Introduction: Syphilitic tonsillitis is an uncommon extragenital manifestation of syphilis that may clinically mimic chronic tonsillitis or oropharyngeal malignancy, resulting in delayed diagnosis and therapeutic challenges. Long-term monitoring is particularly important among men who have sex with men (MSM) because of the high risk of reinfection. This case report aims to emphasize the importance of comprehensive monitoring and evaluation in assessing therapeutic response and detecting reinfection in syphilitic tonsillitis.

Case Presentation: A 27-year-old bisexual man presented with recurrent sore throat, cervical lymphadenopathy, and persistent tongue lesions. Oropharyngeal examination demonstrated asymmetric tonsillar hypertrophy with irregular friable surfaces, raising suspicion of tonsillar malignancy. Before treatment, the patient had a reactive Rapid Plasma Reagin (RPR) result consistent with syphilis infection. He had previously received oral doxycycline followed by three weekly doses of 2.4 million units of intramuscular benzathine penicillin G. Bilateral tonsillectomy was subsequently performed for diagnostic and therapeutic purposes. Histopathological evaluation demonstrated chronic inflammatory changes compatible with syphilitic tonsillitis. During follow-up, TPHA remained reactive, whereas VDRL became non-reactive after treatment and later demonstrated low-titer fluctuation. Significant clinical improvement was observed despite serological variability.

Conclusion: Syphilitic tonsillitis should be considered in patients with atypical chronic tonsillitis or suspected oropharyngeal malignancy, particularly among high-risk populations. Comprehensive monitoring integrating clinical assessment and serial serological evaluation is essential because treatment response may not always correlate with serological findings.

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INTRODUCTION

Syphilitic tonsillitis is an uncommon extragenital manifestation of syphilis involving the oropharynx and palatine tonsils. Oropharyngeal syphilis remains rare and frequently underrecognized because its clinical manifestations often resemble chronic tonsillitis, peritonsillar abscess, or oropharyngeal malignancy [1–3]. Patients commonly present with sore throat, dysphagia, cervical lymphadenopathy, mucosal lesions, or tonsillar enlargement. Because these findings are nonspecific, diagnosis is often delayed and may result in inappropriate treatment or unnecessary invasive procedures [2].

The global resurgence of syphilis, particularly among men who have sex with men (MSM), has increased the frequency of atypical and extragenital presentations [4,5]. Epidemiological studies consistently show that MSM remain disproportionately affected and are at increased risk of reinfection [4,6]. This trend highlights the importance of long-term surveillance, regular follow-up, and preventive interventions in high-risk populations [4,7].

Secondary syphilis frequently involves mucosal surfaces, including the oral cavity and oropharynx. Mucous patches are among the most characteristic oral manifestations and contain large numbers of spirochetes, making them highly infectious lesions [8]. However, oral syphilis remains diagnostically challenging because lesions may occur without concomitant genital findings or classical palmoplantar eruptions [9]. Consequently, syphilis may be overlooked in the differential diagnosis of chronic oropharyngeal disease.

Monitoring and evaluation of syphilitic tonsillitis extend beyond initial diagnosis and treatment. Clinical improvement and serological response do not always correlate, particularly in patients at risk of reinfection [10]. Current guidelines recommend serial quantitative non-treponemal testing after therapy to assess treatment response and detect reinfection or treatment failure [11–13]. Interpretation of low-level serological fluctuations may be challenging and should be integrated with clinical findings and treatment history [7].

This case report describes a patient with syphilitic tonsillitis initially suspected of tonsillar malignancy and highlights the importance of comprehensive monitoring and evaluation in assessing therapeutic response and ensuring long-term disease control.

CASE PRESENTATION

A 27-year-old bisexual man was referred from the Department of Otorhinolaryngology to the Dermatology and Venereology Clinic because of recurrent sore throat accompanied by discordant syphilis serological findings. The patient complained of recurrent episodes of sore throat for six months, occurring three to four times monthly and associated with intermittent low-grade fever and a sensation of obstruction during swallowing. He also reported persistent white lesions on the tongue and a left cervical neck mass that had gradually enlarged over four months.

The patient had previously been diagnosed with syphilis approximately 18 months before presentation after a reactive Rapid Plasma Reagin (RPR) test and was treated with a single dose of intramuscular benzathine penicillin G. Six months later, repeat serological testing remained reactive, and he subsequently received oral doxycycline 100 mg twice daily for 30 days. Clinical improvement was incomplete, and recurrent sore throat persisted. At another institution, serological testing demonstrated reactive *Treponema pallidum* hemagglutination assay (TPHA), non-reactive VDRL, and non-reactive HIV results. Because of persistent symptoms, the patient received three weekly doses of 2.4 million units of intramuscular benzathine penicillin G.

The patient reported multiple male sexual partners during the previous six years and frequently engaged in unprotected oral and anal intercourse. His most recent sexual contact occurred approximately seven months before presentation. No previous history of genital ulceration, palmoplantar rash, diffuse alopecia, or genital warts was reported. The patient denied illicit drug use.

Physical examination demonstrated asymmetric tonsillar hypertrophy (T2/T4), friable tonsillar tissue with enlarged crypts, and bilateral cervical lymphadenopathy. Hypopigmented erosive lesions on the tongue were consistent with mucous patches of secondary syphilis. No cutaneous, genital, or perianal lesions suggestive of active syphilis were identified. General physical examination was otherwise unremarkable.

Laboratory evaluation revealed reactive TPHA and non-reactive VDRL results. HIV serology was negative. Gram staining from pharyngeal and tongue specimens demonstrated normal bacterial flora without evidence of acute bacterial infection. Computed tomography of the head and neck demonstrated bilateral tonsillar enlargement, right tonsillar abscess formation, and multiple cervical lymphadenopathies.

An initial tonsillar biopsy demonstrated chronic suppurative tonsillitis. However, because tonsillar carcinoma and lymphoma remained major diagnostic considerations, bilateral tonsillectomy was performed for both diagnostic and therapeutic purposes. Histopathological examination revealed chronic inflammatory changes without evidence of neoplasia. Subsequent pathological review identified chronic inflammatory infiltrates and granulation tissue compatible with active syphilitic tonsillitis.

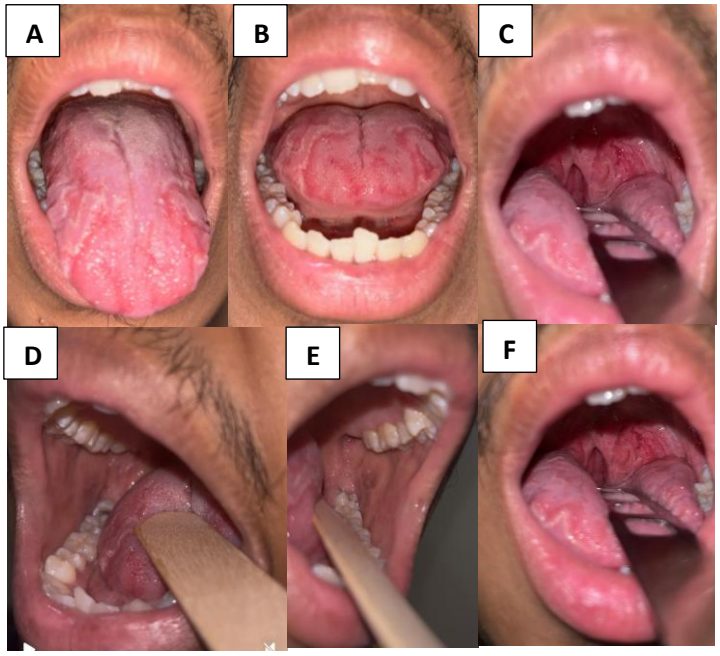


Figure 1. **Oropharyngeal Findings.**
Oropharyngeal examination demonstrated hypopigmented patch-plaque lesions and erythematous macular patches on the tongue (**A,B**). Asymmetric tonsillar hypertrophy (T2/T4) with an irregular friable surface, widened crypts, and absence of tonsillar detritus was observed (**C,F**).

The final diagnosis was established through integration of sexual history, clinical manifestations, serological examination, histopathological findings, and therapeutic response. Following treatment, serial monitoring demonstrated non-reactive VDRL results at months 1, 3, and 6. At month 9, VDRL became weakly reactive at a titer of 1:2, whereas TPHA remained reactive throughout the follow-up period.

Despite low-titer serological fluctuation, the patient experienced marked clinical improvement. Sore throat resolved completely, cervical lymphadenopathy diminished significantly, and mucous patches gradually improved. No neurological symptoms suggestive of neurosyphilis were identified during follow-up. The patient continued to receive counseling regarding safer sexual practices, partner notification, and regular STI screening. Long-term monitoring was planned for 24 months after therapy.

DISCUSSION

Syphilitic tonsillitis represents a rare manifestation of oropharyngeal syphilis and poses a diagnostic challenge because its presentation may resemble chronic inflammatory disease or malignancy [1,3]. Oropharyngeal involvement most commonly occurs during secondary syphilis and may manifest as mucous patches, tonsillar hypertrophy, ulceration, cervical lymphadenopathy, dysphagia, or systemic symptoms [8,9,14]. Because these findings are often nonspecific, diagnosis may be delayed, particularly in the absence of classical genital or cutaneous manifestations.

The present case initially raised suspicion of tonsillar carcinoma because of asymmetric tonsillar hypertrophy and persistent cervical lymphadenopathy [15]. Similar cases have been reported by Camps et al. and Komeno et al., emphasizing the importance of considering syphilis in patients with atypical tonsillar enlargement [3,9]. The absence of genital lesions further complicated the diagnosis and highlights



Figure 2. Clinical Improvement After Treatment.
The oropharyngeal region demonstrated improvement of the hypopigmented patch-plaque lesions and erythematous macular patches on the tongue. Bilateral tonsils were absent (T0/T0) following tonsillectomy.

the importance of obtaining a comprehensive sexual history. Although the patient had received antimicrobial therapy, persistent tonsillar enlargement and radiological findings continued to raise concern for malignancy, leading to bilateral tonsillectomy for definitive diagnosis and symptomatic relief.

Several risk factors for reinfection were identified, including multiple sexual partners and inconsistent condom use. Epidemiological studies consistently demonstrate increased syphilis prevalence and reinfection among MSM populations worldwide [4,6]. These findings highlight the importance of sexual history assessment when evaluating unexplained chronic oropharyngeal lesions [16]. In addition, stigma associated with sexually transmitted infections may delay healthcare-seeking behavior and reduce disclosure of sexual practices, thereby complicating clinical evaluation [2].

Definitive diagnosis of oral syphilis remains difficult because direct detection methods have limitations. Dark-field microscopy is not recommended in oral lesions because commensal oral treponemes may interfere with interpretation. Culture of *Treponema pallidum* is not routinely available, and direct fluorescent antibody testing is rarely performed in many clinical settings [12,17]. In the present case, direct detection methods, including dark-field microscopy, direct fluorescent antibody testing, and polymerase chain reaction, were not performed because these modalities were unavailable at our institution. Consequently, the diagnosis relied on serological findings, clinical manifestations, and therapeutic response.

An important aspect of this case was the interpretation of serological findings in the context of previous treatment. Before treatment, the patient had a reactive Rapid Plasma Reagin (RPR) result, whereas VDRL became non-reactive after antimicrobial therapy. Since non-treponemal titers may decline following successful treatment, a non-reactive VDRL result does not necessarily exclude previous syphilis infection [10,11].

Furthermore, a reactive TPHA accompanied by a non-reactive VDRL result does not exclusively indicate active syphilis and may occur in previously treated syphilis, late latent syphilis, or false-positive treponemal reactions [10,12]. Therefore, serological findings should always be interpreted in conjunction with clinical manifestations, treatment history, histopathological findings, and therapeutic response. Reliance on a single serological parameter may result in diagnostic uncertainty.

Clinical and histopathological findings in syphilitic tonsillitis are frequently nonspecific and may overlap with inflammatory or neoplastic conditions [1,18]. Histopathological findings in syphilitic tonsillitis may include plasma cell infiltration, vasculitis, endothelial proliferation, granulomatous inflammation, and chronic inflammatory infiltrates [18,19]. Similar findings may also occur in chronic inflammatory diseases or neoplastic conditions, necessitating careful interpretation. Histopathological examination in

this patient initially suggested chronic suppurative tonsillitis, while chronic inflammatory infiltrates and granulation tissue were compatible with, but not diagnostic of, syphilitic tonsillitis. Therefore, the final diagnosis was established through comprehensive clinicopathological correlation.

Another important finding was the discrepancy between serological fluctuation and clinical improvement during follow-up. Although VDRL became weakly reactive (1:2) at month 9, no new clinical manifestations developed, and substantial clinical improvement was maintained [7,10]. Because no fourfold increase in non-treponemal titer was documented and no new clinical manifestations developed, the isolated VDRL titer of 1:2 was insufficient to establish treatment failure or reinfection. This finding may represent biological or laboratory variation; however, very early reinfection could not be completely excluded. Therefore, treatment success should not be determined solely by serological findings without considering the overall clinical response.

Current guidelines recommend serial quantitative non-treponemal testing after treatment to identify treatment failure or reinfection [11–13]. Persistent or rising titers should prompt further evaluation, whereas isolated low-titer fluctuations without clinical deterioration may not necessarily indicate treatment failure. Clinical assessment, therefore, remains essential in long-term monitoring.

Monitoring and evaluation are particularly important among MSM because of the high risk of reinfection. Long-term management should include serial serological assessment, behavioral counseling, partner notification, safer-sex education, and routine screening for other sexually transmitted infections, including HIV [11,20]. The patient received counseling regarding partner notification and safer-sex practices. HIV screening was non-reactive during follow-up, and regular STI surveillance was recommended. Information on partner evaluation and treatment was unavailable because partner assessment was not performed at our institution.

This case also highlights the importance of multidisciplinary collaboration involving dermatovenereologists, otorhinolaryngologists, pathologists, and laboratory specialists. Integrated evaluation facilitated accurate diagnosis, exclusion of malignancy, and appropriate long-term follow-up. Early recognition of atypical manifestations of syphilis may reduce unnecessary invasive procedures and improve patient outcomes.

CONCLUSION

Syphilitic tonsillitis is a rare manifestation of syphilis that may mimic chronic tonsillitis or oropharyngeal malignancy. Comprehensive clinical and serological monitoring is essential because therapeutic response may not always correlate with serological changes. Early recognition and multidisciplinary management are important to prevent delayed diagnosis, reinfection, and long-term complications.

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CONFLICT OF INTEREST

In the interest of transparency, the authors confirm that they have no conflicts of interest pertaining to the publication of this work.

REFERENCES

1. Guarino P, Chiari F, Carosi C, Parruti G, Caporale CD, Presutti L, et al. Description of clinical cases and available diagnostic tools of oropharyngeal syphilis: a systematic review of the literature. BMC Infect Dis. 2024 Nov 6;24(1):1252. doi:10.1186/s12879-024-10129-1
2. Smith MH, Vargo RJ, Bilodeau EA, Anderson KM, Trzcinska A, Canterbury CR, et al. Oral Manifestations of Syphilis: a Review of the Clinical and Histopathologic Characteristics of a Reemerging Entity with Report of 19 New Cases. Head Neck Pathol. 2021 Sep 18;15(3):787–95. doi:10.1007/s12105-020-01283-4

3. Camps G, Pavelchek C, Eldaya R, Parsons M. Novel radiographic presentation of primary syphilis of the tonsil. Radiol Case Rep. 2021 Nov;16(11):3217–21. doi:10.1016/j.radcr.2021.07.047
4. Zheng Y, Ye K, Ying M, He Y, Yu Q, Lan L, et al. Syphilis epidemic among men who have sex with men: A global systematic review and meta-analysis of prevalence, incidence, and associated factors. J Glob Health. 2024 Jan 19;14:04004. doi:10.7189/jogh.14.04004
5. Xiong S, Liu Z, Zhang X, Huang S, Ding X, Zhou J, et al. Resurgence of syphilis: focusing on emerging clinical strategies and preclinical models. J Transl Med. 2023 Dec 18;21(1):917. doi:10.1186/s12967-023-04685-4
6. Roberto Queiroz P, dos Santos MM, Lopes AKB, da Silva JA, Aranha Filho BG da S, Costa TG, et al. Prevalence and factors associated with syphilis among men who have sex with men in Brazil. Front Public Health. 2025 May 8;13. doi:10.3389/fpubh.2025.1465799
7. Jennings JM, Wagner J, Tilchin C, Schumacher CM, Thornton N, Hamill MM, et al. Methamphetamine Use, Syphilis, and Specific Online Sex Partner Meeting Venues Are Associated With HIV Status Among Urban Black Gay and Bisexual Men Who Have Sex Men. Sex Transm Dis. 2021 Aug;48(8S):S32–9. doi:10.1097/OLQ.0000000000001452
8. Marchese V, Tiecco G, Storti S, Degli Antoni M, Calza S, Gulletta M, et al. Syphilis Infections, Reinfections and Serological Response in a Large Italian Sexually Transmitted Disease Centre: A Monocentric Retrospective Study. J Clin Med. 2022.
9. Srisungsuk S, Piyawannarat N, Siripongboonsitti T. Oropharyngeal Condyloma Lata in Secondary Syphilis: Case Report and Literature Review. American Journal of Case Reports. 2025 Mar 6;26. doi:10.12659/AJCR.947118
10. Komeno Y, Ota Y, Koibuchi T, Imai Y, Iihara K, Ryu T. Secondary Syphilis with Tonsillar and Cervical Lymphadenopathy and a Pulmonary Lesion Mimicking Malignant Lymphoma. American Journal of Case Reports. 2018 Mar 4;19:238–43. doi:10.12659/AJCR.907127
11. Shah D, Marfatia Y. Serological tests for syphilis. Indian J Sex Transm Dis AIDS. 2019;40(2):186. doi:10.4103/ijstd.IJSTD_86_19
12. Workowski KA. Sexually transmitted infections treatment guidelines . MMWR Recommendations and Reports. 2021.
13. Papp JR, Park IU, Fakile Y, Pereira L, Pillay A, Bolan GA. CDC Laboratory Recommendations for Syphilis Testing, United States, 2024. Atlanta; 2024 Feb.
14. Perhimpunan Dokter Spesialis Kulit dan Kelamin Indonesia. Panduan Praktik Klinis bagi Dokter Spesialis Dermatologi, Venereologi, dan Estetika Indonesia. Jakarta; 2024. 736–746 p.
15. Taniguchi T, Yamamoto M, Miyoshi S, Shimizu S. Unilateral tonsillitis due to primary syphilis with gram-negative corkscrew-like spirochaetes confirmed by Gram stain of pus. BMJ Case Rep. 2024 Feb 17;17(2):e258549. doi:10.1136/bcr-2023-258549
16. Nimmana BK, Paterek E. Tonsillitis. 2025. PubMed PMID: 31335062.
17. Kang S, Amagai M, Bruckner A, Enk A, Margolis D, McMichael A, et al. Fitzpatrick's Dermatology. 9th ed. New York: Mc Graw Hill; 2019.
18. Purnamasari I, Hidayati AN, Etty Hary Kusumastuti, Isaak Effendy. The Histopathological Features of Syphilis and Its Mimickers. Folia Medica Indonesiana. 2023 Mar 5;59(1):63–9. doi:10.20473/fmi.v59i1.37286
19. Bant P, Jurkiewicz D, Cierniak S. Selected Immunohistochemical Assessment and Clinical Examinations in the Diagnosis of Palatine Tonsil Diseases. J Clin Med. 2023 Jul 6;12(13):4522. doi:10.3390/jcm12134522
20. Mahmud S, Mohsin M, Muyeed A, Islam MM, Hossain S, Islam A. Prevalence of HIV and syphilis and their co-infection among men having sex with men in Asia: A systematic review and meta-analysis. Heliyon. 2023 Mar;9(3):e13947. doi:10.1016/j.heliyon.2023.e13947.