

SECONDARY SYPHILIS MANIFESTING AS MULTIFOCAL ORAL ULCERATIONS, DYSPHONIA, AND CERVICAL LYMPHADENOPATHY: A CASE REPORT

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Abstract

This case exemplifies a diagnostically intricate scenario of secondary syphilis, marked by painful multifocal oral lesions, dysphonia, and cervical lymphadenopathy, which initially mimic inflammatory or malignant disorders. Secondary syphilis has experienced a worldwide resurgence and can manifest with diverse mucocutaneous symptoms. Oral lesions may serve as the sole initial clinical sign, resulting in misdiagnosis and postponed treatment. A 50-year-old female patient presented with painful multifocal oral ulcerations persisting for four months, along with dysphagia, hoarseness, and bilateral cervical lymphadenopathy. Written informed consent was obtained. A thorough clinical evaluation, serological analysis, cervical lymph node cytology, ENT examination, and imaging studies were conducted. Fiberoptic laryngoscopy revealed epipharyngeal swellings and edema of the vocal folds. Serological tests were indicative of secondary syphilis. Despite receiving counseling, the patient declined biopsy and treatment. The diagnosis was confirmed through clinical correlation and serological evidence. This case highlights the necessity for enhanced clinical awareness of syphilis in patients who present with persistent oral ulcers and systemic symptoms. Early identification is crucial to avert complications; however, the patient's refusal of care poses a significant obstacle to effective management.

Keywords: syphilis, secondary syphilis, oral ulcerations, cervical lymphadenopathy, TPHA

Introduction

Syphilis is a chronic multisystemic infection caused by the spirochete *Treponema pallidum*, which is characterized by distinct stages that exhibit varied clinical manifestations^[1,2]. Over the past decade, the incidence of syphilis has significantly increased worldwide, particularly among pregnant women, people living with HIV and homosexual men, with more recent reports of rising rates among heterosexual populations in several regions^[3-5].

The secondary stage of syphilis, known to be the most infectious, often affects mucocutaneous surfaces and may present with oral lesions in as many as 30 % of cases^[6-9].

Oral manifestations of syphilis are highly diverse and can resemble conditions such as recurrent aphthous stomatitis, candidiasis, lichen planus, leukoplakia, traumatic ulcers or even early oral cancer. The presence of indurated borders, multifocal distribution, and persistent ulceration often leads to diagnostic ambiguity. Additionally, extraoral manifestations, such as lymphadenopathy, laryngopharyngeal lesions, and constitutional symptoms, further complicate the clinical scenario^[6-9].

We report a diagnostically challenging case of secondary syphilis in a middle-aged woman who presented with persistent, multifocal, painful oral ulcerations, dysphonia, and cervical lymphadenopathy, initially misdiagnosed as a chronic inflammatory disease with no improvement following treatment. The patient declined both biopsy and treatment, highlighting the challenges clinicians encounter when managing sexually transmitted infections (STIs) that are complicated by patient denial or stigma.

Case report

A 50-year-old female patient was referred to the Department of Oral and Periodontal Diseases, Faculty of Dentistry - Skopje, Ss. Cyril and Methodius University in Skopje, with a 4-month history of persistent and painful oral lesions affecting the apex of the tongue, the left lateral border of the tongue, and the bilateral retrocommissural buccal mucosa, which resulted in a significant decrease in her food intake. In the month prior to her admission, she experienced progressive hoarseness that led to nearly complete voice loss by the time of her visit, necessitating assistance from family members for communication purposes. Previous interventions, including methylene blue, topical antimycotics, and topical corticosteroids, failed to yield any clinical improvement. The patient disclosed a 30-year history of smoking 5-10 cigarettes daily and regular use of prazepam, with no other systemic diseases, allergies, or history of alcohol or recreational drug use.

She reported experiencing general malaise, dysphagia, a sore throat, and a subjective fever the day before her presentation, along with transient edema in the right periorbital area and right knee, which resolved spontaneously. An extraoral examination revealed bilateral cervical lymphadenopathy in the submental and submandibular regions, with a palpable enlarged lymph node in the IIA compartment that corresponded to a previously documented 12.6-mm node on computed tomography. No genital lesions were noted. Additionally, newly developed, highly pruritic macules resembling pityriasis alba were observed on both arms.



Fig. 1. Ulcerated indurated lesion on right retrocommissural buccal mucosa



Fig. 2. Coalescing ulcerated lesions on left retrocommissural buccal mucosa



Fig. 3. Endophytic indurated hyperkeratotic lesion on the tongue apex and exophytic indurated lesion on the left lateral tongue border



Fig. 4. Erythematous indurated ulcerative lesion on the lower labial mucosa



Fig. 5 Erosive lesion at the hard–soft palate junction

The intraoral examination indicated poor oral hygiene and multiple ulcerated lesions with indurated borders on the bilateral retrocommissural buccal mucosa (Figures 1 and 2). Two indurated lesions resembling leukoplakia were identified on the tongue - one slightly endophytic on the apex and the other exophytic on the left lateral border (Figure 3). Moreover, an erythematous indurated ulcer with superficial erosion on the lower labial mucosa, as well as an inflamed lesion with central erosion at the junction of the hard and soft palate were noted (Figures 4 and 5). A prior culture of bacteria and fungi from the lesions on the tongue yielded negative results, while an abdominal ultrasound conducted one month prior indicated mild hepatic hyperechogenicity without any structural abnormalities.

Fiberoptic laryngoscopy revealed smooth, non-ulcerated swellings in the epipharynx along with bilateral edema of the vocal folds. Fine-needle aspiration cytology of the IIA lymph node showed chronic inflammation characterized by significant eosinophilia, with no signs of atypical or malignant cells. Serological tests indicated positive results. Taken together, these findings corroborated a diagnosis of secondary syphilis with notable involvement of the oral cavity and laryngopharynx.

The diagnosis, along with its possible complications and the suggested treatment options, was comprehensively explained to the patient. However, she refused to accept the diagnosis of syphilis and refused both the biopsy and treatment. After this consultation, she failed to attend her scheduled appointments and was subsequently lost to follow-up.

Discussion

Secondary syphilis is marked by a diverse array of mucocutaneous and systemic symptoms, which has led to its historical label as "the great imitator"^[6-10]. Oral lesions can manifest in as many as one-third of affected individuals, often appearing as multiple, painful, indurated ulcerations or mucous patches with varying pain that resemble infectious, autoimmune, or neoplastic disorders^[6-9]. In the current case, the presence of multifocal ulcerations on the buccal mucosa and tongue, along with leukoplakia-like and endophytic characteristics, initially indicated a chronic inflammatory or possibly malignant condition. The absence of improvement following extended topical treatment further necessitated an expanded differential diagnosis.

Cervical lymphadenopathy is a commonly recognized yet nonspecific sign of secondary syphilis and may occur simultaneously with oral or cutaneous lesions^[9,11,12]. In our patient, the

presence of bilateral lymphadenopathy, epithelial induration, and systemic symptoms such as malaise and dysphagia raised suspicions of underlying immunosuppression or a disseminated infection. Fine-needle aspiration demonstrated chronic inflammation with significant eosinophilia, which aligns with the reactive changes observed in syphilitic lymphadenitis, typically characterized by polymorphous infiltrates devoid of malignant features^[13,14].

Laryngopharyngeal involvement in syphilis is rare but well-documented^[9,15]. Fiberoptic laryngoscopy conducted on this patient revealed epipharyngeal swellings and edema of the vocal folds, which corresponded with her worsening dysphonia. Comparable cases indicate that syphilitic lesions affecting the vocal folds and epiglottis may imitate chronic laryngitis, granulomatous diseases, or early neoplastic alterations, thereby complicating the diagnostic process^[9,16,17].

Serologic testing continues to be the fundamental method for diagnosis, utilizing both treponemal and non-treponemal tests to verify active infection and assess disease progression^[1,18,19]. The patient exhibited positive serologic findings, indicative of secondary-stage disease. Although the clinical presentation and serologic results were characteristic, the patient's refusal to undergo a biopsy hindered histopathologic assessment, which is particularly beneficial in atypical oral manifestations and in distinguishing syphilis from malignant lesions or autoimmune mucosal disorders.

Refusal of treatment poses a significant obstacle in the management of STIs and is often linked to stigma, skepticism, or fear^[1,20,21]. Penicillin remains the first-line treatment for all stages of syphilis. Benzathine penicillin G is recommended for most non-neurological stages, yielding excellent results when administered without delay, whereas neurosyphilis requires administration of aqueous penicillin G.^[1,22] If left untreated, secondary syphilis can advance to latent or tertiary stages, leading to potential cardiovascular, neurological, and systemic complications^[1]. This case emphasizes the necessity for compassionate communication, patient education, and interdisciplinary collaboration to promote acceptance of the diagnosis and adherence to treatment guidelines.

The involvement of dental professionals is particularly crucial, as oral lesions may serve as the initial or sole indication of secondary syphilis. Prompt identification and appropriate referral can avert misdiagnosis, decrease transmission rates, and lessen long-term health issues. This case highlights the critical need to maintain a comprehensive differential diagnosis when faced with persistent oral ulcerations, especially when conventional treatments are ineffective.

Conclusions

Secondary syphilis is referred to as "the great imitator" because of its varied and frequently misleading clinical presentations. This case exemplifies how oral ulcerations, cervical lymphadenopathy, and dysphonia can hinder accurate diagnosis, especially when lesions are both multifocal and resistant to conventional topical treatments. Accurate diagnosis depends on clinical suspicion, comprehensive extraoral and intraoral assessments, and timely serologic evaluations. Dental professionals may be the initial practitioners to observe such symptoms, highlighting the necessity for heightened awareness and collaborative efforts across disciplines. The refusal of patients to undergo diagnostic or therapeutic interventions poses a considerable obstacle, emphasizing the importance of effective communication, compassionate counseling, and active public health involvement.

Conflict of interest statement. None declared.

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