(International Print/Online Journal)

SJIF IMPACT FACTOR: 5.565
PUBMED-National Library of Medicine ID-101739732

ISSN (Print): 2209-2870
ISSN (Online): 2209-2862

International Journal of Medical Science and Current Research (IJMSCR)
Available online at: www.ijmscr.com
Volume 6, Issue 6 , Page No: 517-521
November-December 2023

IJMSCR

Silent Intruder Unveiled: A Case of Secondary Syphilis Presenting with Oral Lesions

[1]Dr. Manasha K, [2]Dr. Indradevi R, [3]Dr. Sucharitha S
[1]Second Year Postgraduate , [2]Professor & HOD , [3]Assistant Professor
[1,2,3]Department of Dermatology,
Sri Lakshmi Narayana Institute of Medical Sciences, Villianur commune, Agaram Village,
Kudappakkam Post, Puducherry, Pin - 605502, India

***Corresponding Author:**
Dr. Indradevi R
Professor & HOD, Sri Lakshmi Narayana Institute of Medical Sciences, Villianur commune, Agaram Village,
Kudappakkam Post, Puducherry, Pin - 605502, India

Type of Publication: Case Report
Conflicts of Interest: Nil

Abstract

This case report presents a 28-year-old male resident of South India with no comorbidities, who sought medical attention due to asymptomatic lesions over his lower lip and the lateral aspect of his tongue persisting for one month. The patient's history of unprotected sexual contact with an unknown partner raised concerns for a sexually transmitted infection. Clinical examination revealed characteristic oral lesions, and the diagnosis of secondary syphilis was clinically suspected. Confirmation was achieved through histopathological examination, which revealed spongiform pustules, neutrophilic exocytosis, and a dense lymphoplasmacytic infiltrate 2. Laboratory investigations included a rapid plasma reagin (RPR) titer of 1:8 and a positive Treponema pallidum haem agglutination assay (TPHA) of 1:160, further supporting the diagnosis4. The patient was promptly treated with 2.4 million units of intramuscular benzathine penicillin G in a single administration, resulting in resolution of the symptoms. This case underscores the importance of recognizing the diverse clinical manifestations of secondary syphilis, emphasizing the role of histopathology and serological tests in confirming the diagnosis, and the necessity of prompt treatment.

Keywords: Secondary syphilis,Asymptomatic oral lesions,Histopathological examination,TPHA

Introduction

Secondary syphilis, a stage of the sexually transmitted infection caused by Treponema pallidum, is marked by a complex array of clinical manifestations that can affect various organ systems. Following the primary infection, secondary syphilis typically emerges weeks to months later, presenting unique challenges in diagnosis and management[1]. The clinical diversity of secondary syphilis often includes mucocutaneous manifestations, such as oral lesions, making it crucial for healthcare providers to be astute in recognizing the varied presentations of this elusive disease[3].It poses a diagnostic challenge due to its ability to mimic other conditions, and early recognition is pivotal for timely intervention. The subsequent sections detail the clinical presentation, diagnostic journey, and management of secondary syphilis in this particular case, highlighting the importance of vigilance in the face of diverse and often subtle manifestations.

Case Report

A 28-year-old male presented to our dermatology clinic with complaints of asymptomatic lesions on his lower lip and the lateral aspect of his tongue for the past one month. The patient reported a recent history of unprotected sexual contact. He denied any systemic symptoms such as fever, malaise, or rash elsewhere on his body. Physical examination

revealed well-defined, erythematous, painless ulcers on the lower lip and discrete white plaques on the lateral aspect of the tongue.Clinical examination revealed five well-defined, non-tender erosions on the inner aspect of the lower lip, varying in size from 1x0.5 cm to 2x1 cm (FIGURE 1). Additionally, a single tender erosion, measuring 0.5x1 cm, was identified on the right lateral aspect of the tongue (FIGURE 2). Notably, there were no signs of oozing or discharge from these lesions.No lymphadenopathy .Based on the patient's history and the characteristic clinical findings, a provisional diagnosis of secondary syphilis was strongly suspected. To confirm the diagnosis, a biopsy was performed.The histopathological examination of the biopsy revealed several key findings indicative of secondary syphilis. The sections were lined by acanthotic stratified squamous epithelium, and spongiform pustules were observed. Neutrophilic exocytosis, scattered necrotic debris, vacuolar interface changes, and focal epithelial reactive atypia were evident. In the dermis, a dense lymphoplasmacytic infiltrate was observed (FIGURE 3). Additionally, there were noted endothelial proliferation with endothelial swelling and crushing artifacts.Laboratory investigations included a rapid plasma reagin (RPR) titer of 1:8 and a positive Treponema pallidum haem agglutination assay (TPHA) of 1:160, further supporting the diagnosis.Following the confirmation of secondary syphilis, the patient received treatment with 2.4 million units of benzathine penicillin G administered intramuscularly in a single shot. The patient experienced a significant improvement in his symptoms, with the resolution of the oral lesions and the associated discomfort.

Discussion

Secondary syphilis is characterized by its diverse clinical manifestations, often involving multiple organ systems. Mucocutaneous involvement is a common feature of this stage of the disease, with the oral mucosa being a frequent site of presentation[1]. The clinical presentation of secondary syphilis can mimic various other conditions, making its diagnosis challenging. Oral lesions, such as those observed in this case, can manifest as painless white plaques, ulcers, or erythematous papules, and they are often accompanied by systemic symptoms such as malaise, fever, and lymphadenopathy [2].Histopathological examination plays a crucial role in confirming the diagnosis of secondary syphilis. Characteristic findings in histopathology include spongiform pustules, neutrophilic exocytosis, and a dense lymphoplasmacytic infiltrate [3]. Additionally, the presence of spirochetes within the tissue, as demonstrated by Warthin-Starry staining, is diagnostic [4].Serological tests are vital in the diagnosis of syphilis, and in this case, the patient had an RPR titer of 1:8 and a positive TPHA of 1:160. The RPR test is used to screen for the presence of antibodies against syphilis, while TPHA confirms the presence of Treponema pallidum. Both tests, when positive, indicate active infection and help determine the stage of the disease[5].The recognition of secondary syphilis and its prompt treatment with benzathine penicillin are essential for preventing disease progression and transmission. It is imperative for healthcare providers to remain vigilant and consider syphilis in the differential diagnosis of patients with suggestive clinical findings, particularly in those with a history of unprotected sexual contact. Early diagnosis, coupled with comprehensive serological and histopathological assessments, is crucial for effective management of secondary syphilis.

Conclusion

This case highlights the importance of considering secondary syphilis in the differential diagnosis of asymptomatic oral lesions, particularly in individuals with a history of unprotected sexual contact. The case underscores the significance of histopathology and serological tests in confirming the diagnosis and the need for prompt treatment with benzathine penicillin G. Early recognition and intervention are crucial for preventing disease progression and transmission.

Acknowledgments

We express our gratitude to the patient for permitting the use of this case for educational purposes.

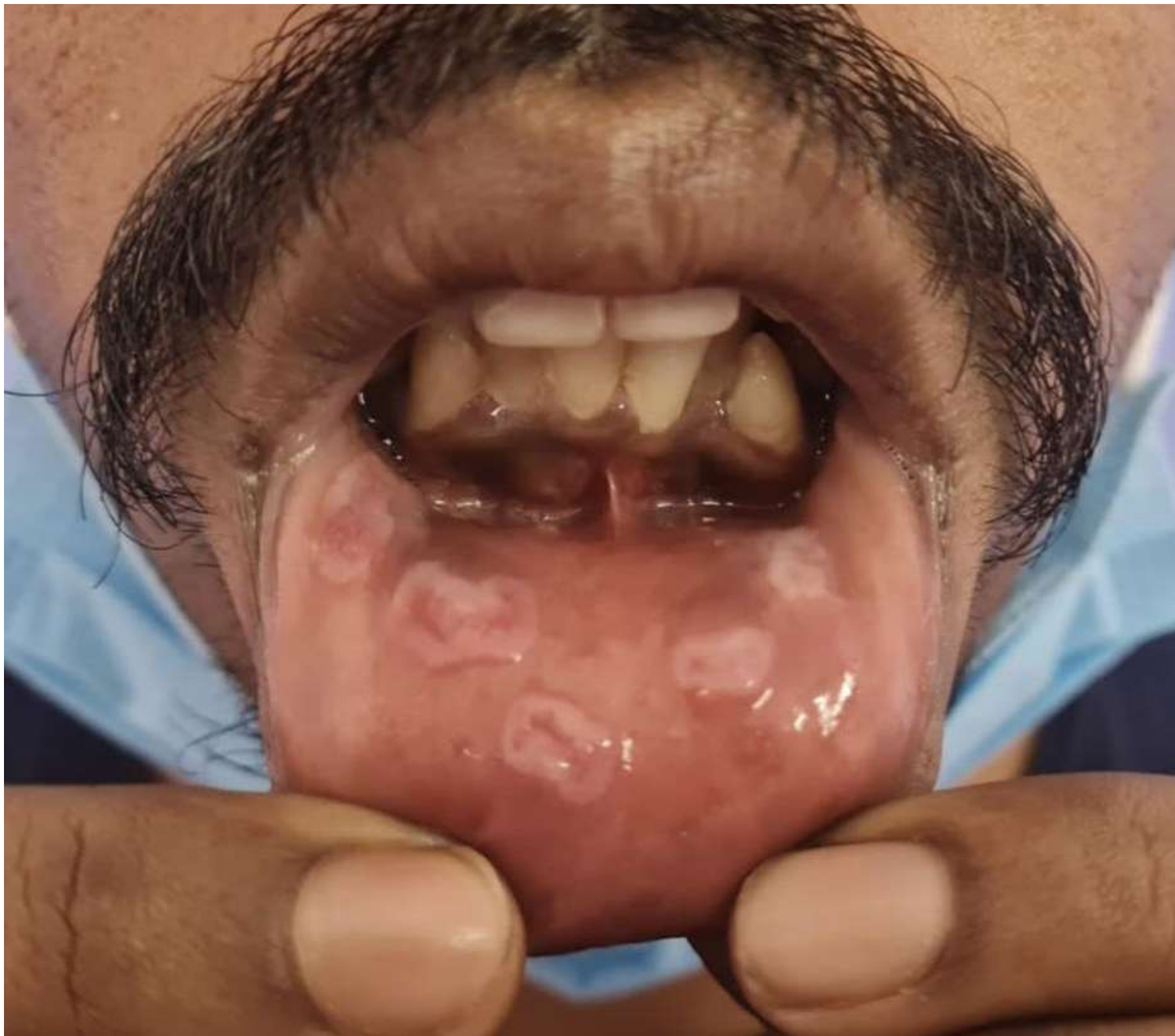
References

1. Hook EW, Marra CM. Acquired syphilis in adults. New England Journal of Medicine. 1992;326(16):1060-9.
2. Regezi JA, Sciubba JJ, Jordan RC. Oral pathology: Clinical pathologic correlations. Elsevier Health Sciences; 2016.

© 2023 IJMSCR. All Rights Reserved

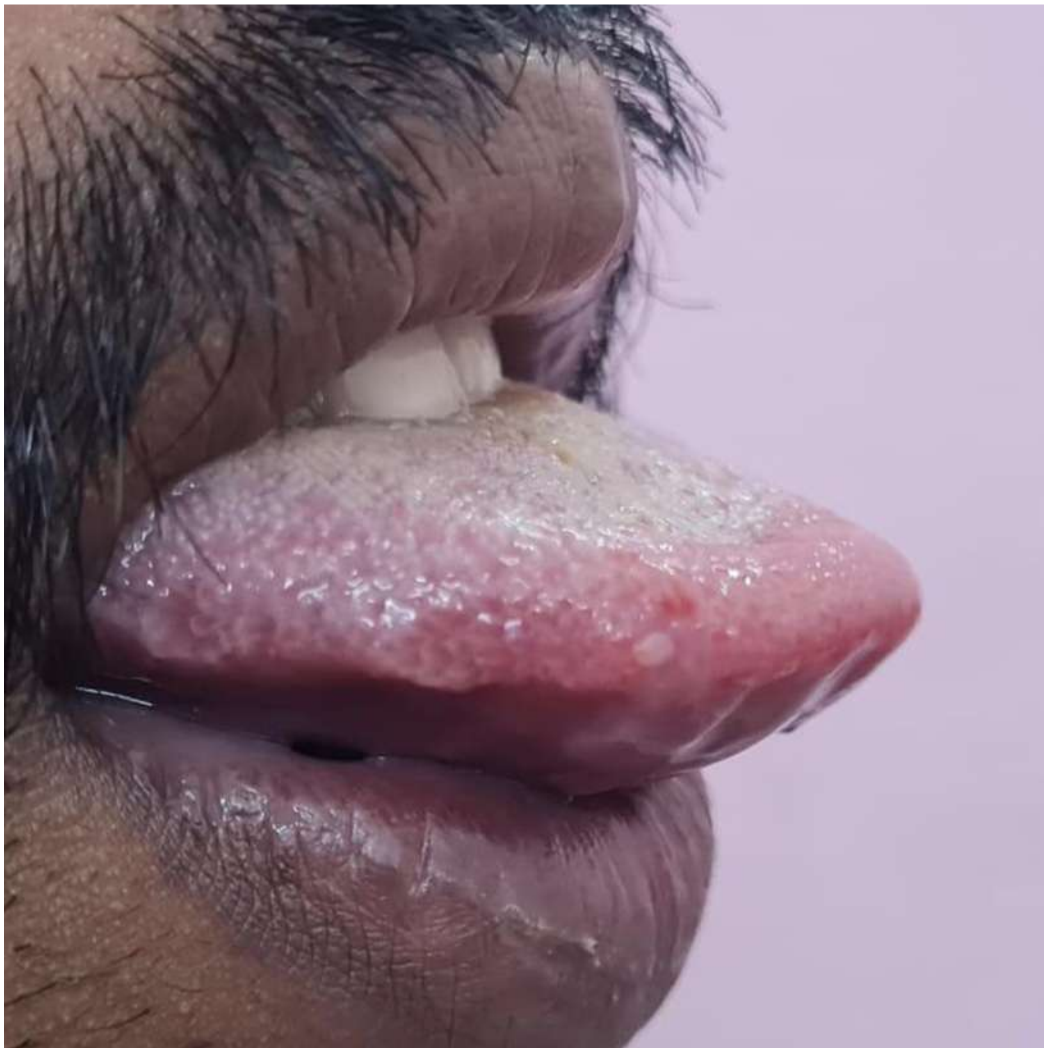
3. Hsu M, Sasaki M, Fujinaga K. Lichenoid secondary syphilis: report of six cases. Journal of cutaneous pathology. 2008;35(9):814-9.
4. Ratnam S. The laboratory diagnosis of syphilis. Canadian Journal of Infectious Diseases and Medical Microbiology. 2005;16(1):45-51.
5. French P. Syphilis. Bmj. 2007;334(7585):143-7.

Fig. 1. Five well-defined, non-tender erosions on the inner aspect of the lower lip, varying in size from 1x0.5 cm to 2x1 cm.



Volume 6, Issue 6; November-December 2023; Page No 517-521
© 2023 IJMSCR. All Rights Reserved

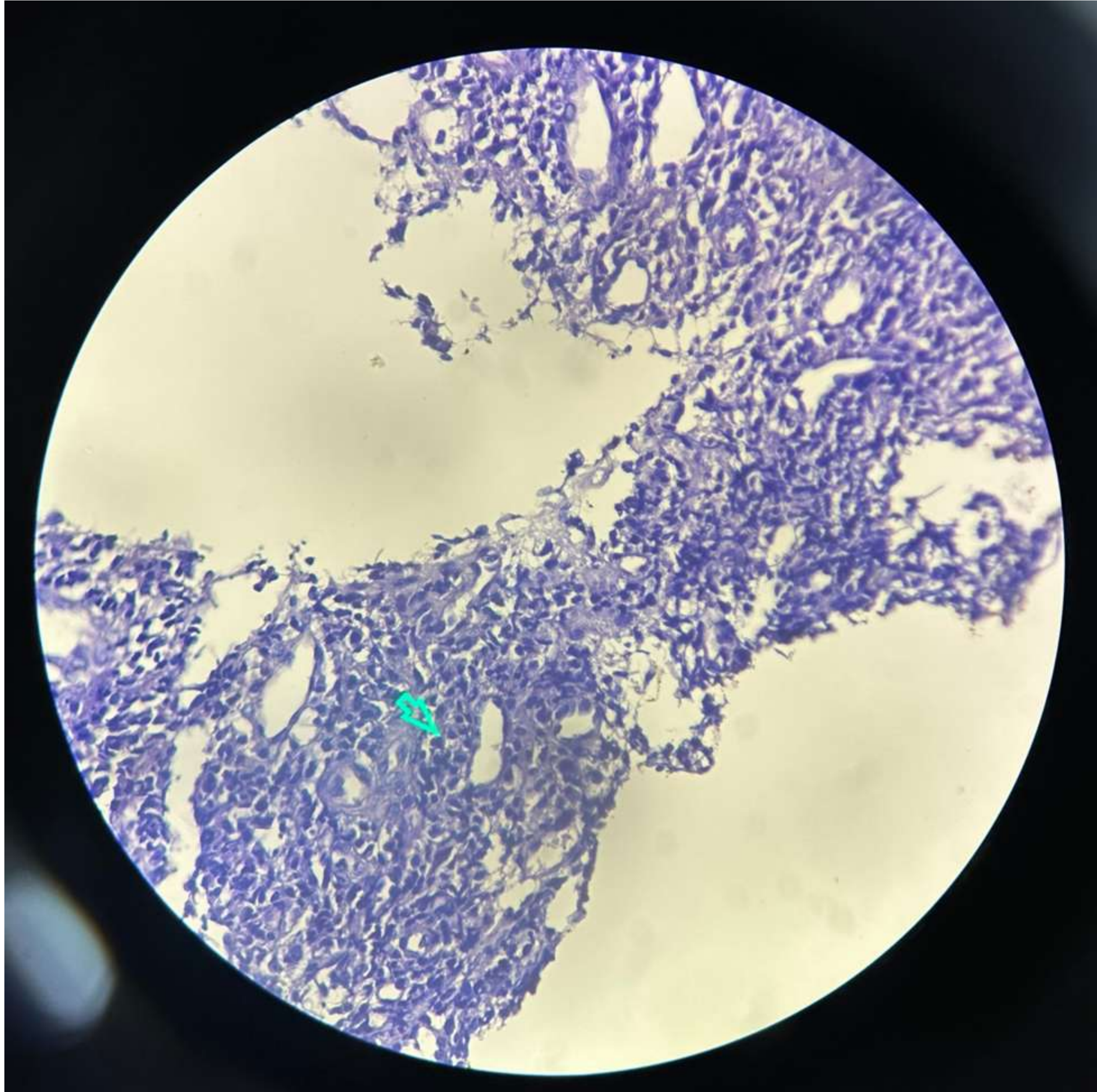
Fig. 2. A single tender erosion, measuring 0.5x1 cm, was identified on the right lateral aspect of the tongue.



Volume 6, Issue 6; November-December 2023; Page No 517-521

© 2023 IJMSCR. All Rights Reserved

Fig. 3. Histopathology specimen on low power microscopy showing neutrophilic exocytosis, scattered necrotic debris, vacuolar interface changes, and focal epithelial reactive atypia. In the dermis, a dense lymphoplasmacytic infiltrate present.



Volume 6, Issue 6; November-December 2023; Page No 517-521
© 2023 IJMSCR. All Rights Reserved