SHORT COMMUNICATION

Atypical oral manifestations in secondary syphilis

Puneeta Vohra Singh, Ranjit Patil[1]

Departments of Oral Diagnosis, Medicine and Radiology, PDM Dental College and Research Institute, Bahadurgarh, Haryana, [1]Department of Oral Medicine and Radiology, Faculty of Dental Sciences, King George Medical University, Lukhnow, Uttar Pradesh, India

Received : 09-11-09
Review completed : 01-07-10
Accepted : 16-09-10

ABSTRACT

Sexually transmitted diseases (STDs) are posing a growing public health problem on a global and national scale. Syphilis is one of the common STD. The dentist is most likely to come across associated oral manifestation of the disease. This is a case report of 60-year-old male patient who presented with multiple erythmatous lesions with shallow ulcerations and crusted appearance on the lip, mimicking few mucocutaneous lesions of oral cavity. He gave history of sexual exposure;further work up revealed it to be a case of secondary syphilis.

Key words: Oral manifestations, secondary syphilis, sexually transmitted diseases

Syphilis is a chronic infectious sexually transmitted disease (STD), caused by the spirochete Treponema Pallidum, first recognized in Europe in 1490s, and has been related to the return of Christopher Columbus. At that time, syphilis was an acute disease that caused destructive skin lesions and early death; but, since then, it has become milder, with a more protracted and insidious clinical course due to widespread use of antibiotics. In the past three decades, there has been widespread upsurge due to pandemic of Human Immunodeficiency Virus (HIV). As per World Health Organization reports, more than 12 million new cases of venereal syphilis occur every year, affecting 6.4 million people in Asia Pacific regions and more than 90% of them in developing countries. Syphilis has florid features sometimes, but there may be marked periods of latency in others. The presence of oral manifestations may be a feature of all stages of syphilis and often may be its first clinical manifestation as there is a renaissance of old disease with oral implications.[1,2] This is a case report of atypical oral manifestation of secondary syphilis.

Address for correspondence:
Dr. Puneeta Vohra Singh
E-mail: drpuneeta_mithi@yahoo.co.in

Access this article online	
Quick Response Code:	Website: www.ijdr.in
	DOI: 10.4103/0970-9290.114928

CASE REPORT

A 60-year-old unmarried Indian male reported to the Department of Oral Diagnosis Medicine and Radiology with a chief complaint of bleeding from lips since 15 days. He also complained of fever, pain, weight loss, loss of appetite, weakness and numerous itchy erythematous lesions on hands, forearms, back and chest since 15 days. The patient gave past history of similar skin lesions 2 years back, which subsided after the treatment. The patient also gave history of unprotected sexual contacts with multiple commercial sex workers.

On general examination, the patient was weak, cachexic, poorly nourished, thin built with normal posture and gait. Extraoral examination revealed excoriating skin lesions seen on both hands, lower forearms, forehead, chest and large healed lesion with a scar formation on lower back region [Figure 1].

On intraoral examination, there were multiple erythematous lesions with shallow ulceration on lower lip and hemorrhagic crusted appearance on right side of lower lip. A hemorrhagic lesion on hard palate, along with melanin pigmentation on dorsal surface of tongue and buccal mucosa was also noticed [Figure 2]. Based on this atypical picture, we came to differential diagnosis of pemphigus, erythema multiforme, benign mucous membrane pemphigoid, HIV associated lesions and syphilis.

The patient was advised blood investigations including complete blood count, protein electrophoresis, antinuclear antibody test, Venereal Disease Research Laboratory (VDRL) test, enzyme-linked immunosorbent assay (ELISA)

for HIV and HBsAg antigen for Hepatitis B, biopsy with direct immunoflourescence (DIF) and dark field microscopy [Figure 3]. All the tests were found to be normal; DIF was negative as only lymphocytes and plasmocytes with endothelial swelling were visible; VDRL was seen to be reactive with high titer of 1:64 and spirochetes were visible in dark field microscope. Thus, on the basis of personal history, clinical manifestation and positive VDRL test and biopsy from lesion site, final diagnosis of secondary syphilis was made. Other more specific investigations like Treponema Pallidum Hemagglutination Assay (TPHA) and Treponema Pallidum Particle-Agglutination Test (TPPA) were not done due to nonavailability and financial constraints.

The patient was treated with 2.4 MU benzathine penicillin every week for 1 month. He was also given betamethasone 4 mg IM each week for 2 weeks to avoid Jarisch-Herxheimer reaction. All the lesions healed completely after 1 month of medication, with no reoccurrence after 3 months of follow-up [Figure 4]. VDRL test was repeated and the titer decreased to 1:32. Patient was counseled and advised to be on regular follow-up after every 3 months.

DISCUSSION

Syphilis is a STD caused by T. pallidum infection and manifests with skin, mucous membrane, and systemic lesions. Data from around the world indicate an increasing prevalence of STDs. Another alarming situation in the context of syphilis is that its manifestations are also being bizarre or atypical. This wide array of manifestations has given syphilis the reputation as a great imitator. In the last 20 years, there has been a gradual increase in new cases of syphilis.[3]

There are four stages of occurrence of acquired syphilis in which primary syphilis typically presents as a solitary, painless chancre, whereas secondary syphilis can have a wide variety of symptoms, especially fever, lymphadenopathy, rash and genital or perineal condyloma latum; all clinical manifestations subside and infection is apparent only on serologic testing.

Figure 1: Excoriating scaly skin lesions on lower forearms

Figure 2: Multiple erythematous lesions with shallow healed ulcerations and hemorrhagic crusted appearance on lower lip

Figure 3: DIF showing dense inflammatory infiltrate composed of lymphocytes and plasmocytes with endothelial cell swelling

Figure 4: Post-treatment photograph of patient after 1 month of medication

Late or tertiary syphilis can manifest years after infection as gummatous disease, cardiovascular disease, or central nervous system involvement which can be finally manifested as neurosyphilis a final or quaternary stage of disease.

The eruption of secondary syphilis has certain characteristics which help to identify and distinguish it from other lesions. Typical mucous membrane lesions tend to be oval, serpiginous, raised erosions or ulcers with an erythematosus border. There is an overlying gray or silver membrane. Sometimes, these lesions can appear as leukokeratosis and involve the tongue, the mucosal lip, or the palate. Usually, the spirochetemia of secondary syphilis is associated with systemic symptoms and a cutaneous eruption; rarely, there may be spirochetemia without cutaneous manifestations. The oral cavity is the most common extragenital site of infection, although isolated oral ulcerations in secondary syphilis are unusual.[3] In fact, there are only a few reports of secondary syphilis presenting with isolated oral lesions.[4] In contrast with oral lesions of primary syphilis, which tend to be solitary, painless, indurated ulcers, oral lesions of secondary syphilis are typically painful and multiple. They are usually accompanied by a concomitant cutaneous eruption.[5,6]

The differential diagnosis of oral lesions of secondary syphilis includes erythema multiforme, stomatitis, pemphigus, lichen, candidiasis, oral gonorrhea, and other STDs.[7-9]

We present this case because of the rare presentation of localized oral lesions of secondary syphilis for 15 days with the absence of skin lesions. There are only a few reports of secondary syphilis presenting with only isolated oral lesions. Moreover, we emphasize the atypical oral involvement.

Presence of atypical oral ulcerations should raise the needle of suspicion toward underlying STDs especially in high-risk group individuals. The diagnosis of syphilis may involve VDRL, dark field microscopy of skin lesions/mucosal lesions and non-treponemal Rapid Plasma Reagin (RPR) test as screening tests and confirmation with a treponemal-specific test Flourescent Treponemal Antibody Absorbed Assay (FTA-ABS) and TPHA.[10] Parenterally administered penicillin G is considered as the first-line therapy for all stages of syphilis. Alternative regimens for nonpregnant patients with no evidence of central nervous system involvement include Doxycycline, Tetracycline, Ceftriaxone, and azithromycin.[11]

CONCLUSION

Establishing a diagnosis of syphilis, whatever the stage of the disease, can be difficult because syphilis is a great mimic in clinical morphology and histology. Many patients infected with venereal diseases have oral manifestations, but very few dentists and physicians have the proper experience to diagnose syphilis or other STDs from oral lesions. Atypical oral lesions in high-risk group people should raise suspicion toward infectious transmissible diseases. Early diagnosis of such cases reduces the morbidity and also prevents further transmission of the disease. In recent years, the secondary syphilitic lesions found in oral cavity have been noted as often atypical due to inadequate treatment as a result of antibiotic therapy for unrelated infections and increasing trend of association of syphilis with HIV infection. Attention should be paid to all suspicious lesions and stress on the seriousness of these illnesses to prevent pandemic of STDs by early diagnosis, education and referral.

ACKNOWLEDGEMENT

We are grateful to Department of Oral Diagnosis, Medicine and Radiology, K.M Shah Dental College and Hospital and Department of Skin And Veneral Diseases Dheeraj general hospital of Sumandeep university Vadodara, Gujarat for their co-operation.

REFERENCES

1. Little JW. Syphilis: An update. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2005;100:3-9.
2. Scott CM, Flint SR. Oral syphilis-re-emergence of an old disease with oral manifestations. Int J Oral Maxillofac Surg 2005;34:58-63.
3. Junkins-Hopkins JM. Multiple painful oral ulcerations. Secondary syphilis. Arch Fam Med 1996;5:379-80.
4. Aquilina C, Viraben R, Denis P. Secondary syphilis simulating oral hairy leukoplakia. J Am Acad Dermatol 2003;49:749-51.
5. Mani NJ. Secondary syphilis initially diagnosed from oral lesions. Report of three cases. Oral Surg Oral Med Oral Pathol 1984;58:47-50.
6. Kumar B, Gupta S, Muralidhar S. Mucocutaneous manifestations of secondary syphilis in north Indian patients: A changing scenario? J Dermatol 2001;28:137-44.
7. Schimizu T, Shinogi J, Majima Y, Sakakura Y. Secondary syphilis of the tonsil. Arch Otorhinolaryngol 1989;2:117-20.
8. Fiumara NJ, Grande DJ, Giunta JL. Papular secondary syphilis of the tongue. Report of a case. Oral Surg Oral Med Oral Pathol 1978;45:540-2.
9. Mani NJ. Secondary syphilis initially diagnosed from oral lesions. Report of three cases. Oral Surg Oral Med OralPathol 1984;58:47-50.
10. Kar HK. Incidence of secondary syphilis on rise and need for a separate flow chart for its syndromic management. Indian J Sex Transm Dis 2004;25:22-5.
11. Brown DL, Frank JE. Diagnosis and management of syphilis. Am Fam Physician 2003;68:283-90.

How to cite this article: Singh PV, Patil R. Atypical oral manifestations in secondary syphilis. Indian J Dent Res 2013;24:142-4.

Source of Support: Nil, **Conflict of Interest:** None declared.