Mucous patch of secondary syphilis masquerading as leukokeratosis: An atypical presentation

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Abstract

Syphilis is known to inflict human being since long. It has varied clinical presentations. Atypical presentations are not uncommon and may jeopardize the clinical acumen of experienced clinician. Here, we are reporting a case of syphilis presenting as a sole manifestation in oral cavity.

Key words: Leukokeratosis, mucous patch, syphilis

INTRODUCTION

Leukokeratosis is a white patch or plaque that cannot be characterized clinically or pathologically as any other disease.[1] It can be discerned from lichen planus, white sponge nevus and morsicatio buccarum, erythema multiforme, stomatitis, pemphigus, candidiasis, oral gonorrhea, and other sexually transmitted diseases (STDs) clinically.[2] While being primarily asymptomatic and noncancerous, mystery surrounds its etiology. Leukokeratosis could also be a presentation of secondary syphilis. Syphilis is a STD caused by spirochaete *Treponema pallidum*. It has clinically varied presentations. The natural course of the

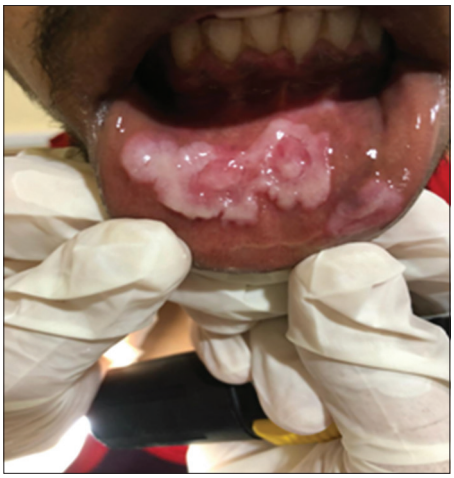

Figure 1: White irregular plaques seen on the inner aspect of lower lip

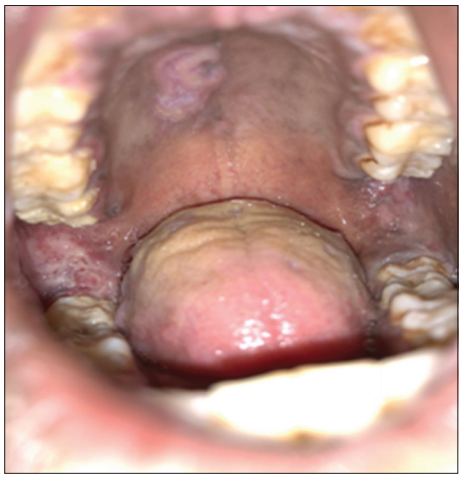

Figure 2: Serpiginous ulcers on hard palate

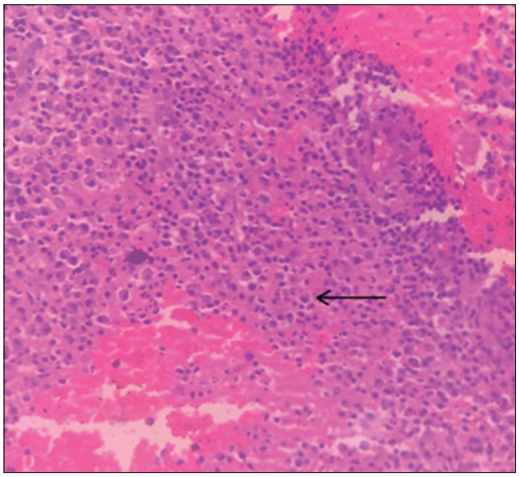

Figure 3: Histopathological examination from oral lesions showing plasma cells (×40)

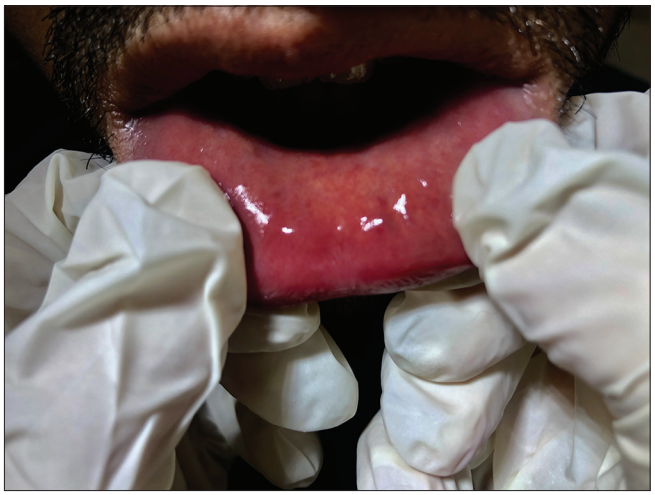

Figure 4: Resolution of lesions on oral mucosa after 1 month of treatment

disease has been divided into four stages: primary, secondary, latent, and tertiary. Secondary syphilis sometimes presents with only oral mucous patches. Secondary syphilis presents predominantly in mucocutaneous tissues as macular, maculopapular, pustular, and rarely nodular rash after a latent period. Atypical presentations are not uncommon and our case emphasizes the importance of suspecting mucocutaneous syphilis in differential diagnosis of solitary oral white mucocutaneous patch.[3]

CASE REPORT

A 19-year-old male presented with asymptomatic oral mucosal white lesion over inner aspect of lower lip [Figure 1]. On enquiry, lesion was noticed 20 days back. On detailed inspection, multiple lesions of similar morphology were seen over buccal mucosa. Hard palate had ulcerative lesion with

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serpiginous margin [Figure 2]. Differential diagnosis of leukokeratosis oral candidiasis and mucous patch of syphilis was considered, and workup was done accordingly. There was no history of unprotected sexual contact, oral sex, fever, dysphagia, odynophagia, and weight loss. The general physical examination did not reveal any specific finding. No cutaneous lesions were observed elsewhere on the body. The lesion from the lower lip was subjected to histopathological examination in addition to the routine investigations. The investigations (complete blood count, liver and kidney function tests, erythrocyte sedimentation rate, Mantoux test and chest X ray) reveal normal results. KOH smear from the lesion was negative, serum hepatitis B surface antigen, hepatitis C virus, and HIV ELISA were nonreactive. VDRL (1:16) with serial dilution and TPHA was reactive. These clinical and laboratory finding favors the diagnosis of mucous patches of secondary syphilis which was further established by histopathological findings [Figure 3]. We treated the patient with 2.4 million IU of benzathiane penicillin intramuscularly. Complete resolution of lesions was obtained by 1 month [Figure 4].

DISCUSSION

Secondary syphilis has been reported sparsely in medical literature with sole oral lesions without cutaneous manifestations.[4] The palms and soles are often involved with the lesions known as "copper pennies" due to their appearance. Pathognomic lesion of secondary syphilis is condyloma lata, which are flat topped moist papular lesions in intertriginous areas. Syphilis may present as latency where seropositivity is without any symptoms. Syphilis can involve different organ systems and may cause blindness, deafness, cardiovascular, neurological complications, and death.[5] Paradoxically, our patient only had mucocutaneous patch in the oral cavity without history of oral sex and cutaneous findings suggestive of secondary syphilis. This type of presentation may be seen in the extragenital primary chancre with a positive history of oral sex. Although, in our case, the history of oral sex was negative, in our sociocultural settings, history regarding sexual practices may be spurious. The presence of leukokeratosis on the inner aspect of lower lip and palatal lesion with serpiginous margin contemplated us to include secondary syphilis as our differential. Many patients infected with venereal disease have oral manifestations, but it is very difficult to diagnose syphilis from solely oral presentations without any other cutaneous manifestations.[6] With the aid of this case report, we wish to emphasize the importance of diagnosing and intervening in the natural course of the disease so as to prevent it's progression to the advanced stage which is riddled with the possibility of many life-threatening complications. These oral patches may lead to a diagnostic dilemma as they can be due to leukokeratosis, lichen planus, candidiasis, pemphigus, nutritional deficiencies, smoking, and long-term alcohol abuse. In the Indian scenario, sexual history often remains obscure as patients deny sexual contact due to the underlying taboo in the community. In a case of oral mucous patch of short duration, we should suspect secondary syphilis even after denial of sexual contact.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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