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## Medical Imagery

## Oral Manifestations of Secondary Syphilis



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## SUMMARY

Known as “the great imitator,” secondary syphilis may clinically manifest itself in myriad ways, involving different organs including the oral mucosa, and mimicking, both clinically and histologically, several diseases, thereby making diagnosis a challenge for clinicians. We highlight the clinical aspects of oral manifestation in 7 patients with secondary syphilis. Clinicians should consider secondary syphilis in the differential diagnosis of ulcerative and/or white oral lesions.

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**Figure 1.** Clinical features of the “mucous patches” form. Slightly and oval elevated plaques, sometimes ulcerate, covered with a white or gray pseudomembrane in the soft palate and labial mucosa.

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Figure 2. Clinical features of the “mucous patches” form. Serpiginous lesions affecting oral mucosa, described as snail track ulcers.



Figure 3. Clinical features of the “leukoplakia-like” form. A well delimited raised surface that was a corrugated, nonhomogeneous white plaque in oral mucosa of two distinct patients.

1. Description

Syphilis is an acute and chronic sexually transmitted disease which is caused by an anaerobic tightly coiled helical bacterial species, *Treponema pallidum*.<sup>1–4</sup> On the basis of its activity and infectivity phase, acquired syphilis can be classified into four stages: primary, secondary, latent, and tertiary.<sup>3,4</sup> Oral lesions are principally associated with secondary syphilis, although all stages can give rise to oral manifestations.<sup>1,2</sup> This wide array of manifestations has given syphilis the reputation as the “great imitator”.

Several clinical forms are described for the secondary syphilis affecting oral mucosa, among which the most common is called “mucous patches” with two subtypes: slightly elevated-type plaques and, occasionally, ulcerated, which are usually oval and covered with a gray or white pseudomembrane; or multiple mucous patches that may coalesce to give rise to serpiginous lesions, described as snail track ulcers. White plaques with verrucous aspect, so-called “leukoplakia like” are also described as another frequent form of disease. However, some cases can manifest atypically, and the diagnosis can be delayed or even missed.<sup>1,2</sup>

Table 1 Description of clinical data of patients with secondary syphilis.

Patient	Age	Sex	Medical history	Site	Type of manifestation	Serological test	PB treatment
1	19	Male	Skin lesions	Hard palate, inferior lip and tongue	Mucous Patches	VDRL+ 1/8 / FTA-ABS +	2,400,000 UI, single dose
2	40	Female	No	Inferior and superior lip	Mucous Patches	VDRL+ 1/32 / FTA-ABS +	2,400,000 UI, single dose
3	25	Female	Genital lesion	Buccal mucosa and tongue	Mucous Patches	VDRL - / FTA-ABS +	2,400,000 UI, single dose
4	32	Male	No	Buccal mucosa and superior lip	Mucous Patches	VDRL+ 1/128 / FTA-ABS +	1,200,000 UI 4 times, weekly interval
5	9	Female	Skin lesions	Inferior lip and tongue	Mucous Patches	VDRL - / FTA-ABS +	2,400,000 UI, single dose
6	29	Male	Genital lesion	Buccal mucosa and tongue	“Leukoplakia-like” plaque	VDRL+ 1/64 / FTA-ABS +	2,400,000 UI, single dose
7	21	Female	Genital lesion	Hard palate and inferior lip	“Leukoplakia-like” plaque	VDRL+ 1/32 / FTA-ABS +	1,200,000 UI 4 times, weekly interval

VDRL, Venereal Disease Research Laboratory; FTA-Abs, fluorescent treponemal antibody absorption; PB, penicillin benzathin.

Table 1 summarizes the clinical profiles, serologic results, and treatment modalities of 7 patients with secondary syphilis (Figs. 1–3). The patients presented here were referred for serologic testing, which revealed a positive result for syphilis (Venereal Disease Research Laboratory [VDRL] positive, Fluorescent Treponemal Antibody [FTA-Abs] positive, *Treponema pallidum* IgM positive). Therapy with benzathine-penicillin, administered intramuscularly led to complete remission of oral lesions and other symptoms in all patients.

Medical practitioners should consider secondary syphilis in the differential diagnosis of white and ulcerative oral lesions, particularly in at-risk groups, and ask questions regarding the development of lesions after sexual activity.<sup>1,2</sup>

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