International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Lichen Planus of the Tongue

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A B S T R A C T

Lichen planus (LP) is a chronic inflammatory disorder that often affects middle-aged and elderly adults with a higher predilections to females. LP can involve the skin or the mucous membranes. It has different morphological variants thus derives its names according to its types. Hypertrophic and erosive oral LP are encountered commonly in our daily practices. Erosive oral LP has higher rate of dysplasia and malignant transformation. The typical oral lichen planus involving the buccal mucosa with bilateral and symmetrical involvement with Wickham striations thus far is the commonest finding. It is quite rare to find oral lichen planus affecting only the tongue. Various drugs or contact allergens like silver amalgam or composite restorations can cause Oral lichenoid lesions (OLL) (lichenoid lesion or lichenoid drug reaction) which poses a diagnostic challenge to many clinicians. It not only mimics the clinical presentation but even histological and immune-fluorescent study results are similar. Therefore, an expertise with good clinical knowledge is essential for proper diagnosis. Early and timely diagnosis is important for proper treatment of oral lichen planus.

Keywords: Lichen planus, Woman, Tongue, Erythema, Striations.

1. Introduction

Lichen planus (LP) is a chronic inflammatory and immune mediated disease. It affects the skin, nails, hair, and mucous membranes of various organs(1). Oral lichen planus (OLP) commonly affects the buccal mucosa but it can affect anywhere in the mouth including tongue, gingiva or palate. It can have various types of presentations in the mouth being hypertrophic and erosive types the most common(2). The lesions are typically bilateral and relatively symmetric. Oral LP (OLP) can be the sole clinical presentation of the disease or accompanied by cutaneous or other mucosal manifestations including the ano-genital area, gastrointestinal tract, and eyes(1). According to the literature, certain presentations of the disease involving the esophagus and eye are under diagnosed many a times(1). Cutaneous lichen planus (CLP) most commonlyinvolves the flexor surfaces of the extremities and presents as small itchy violaceous papules in middle-aged and elderly adults with higher predilections to females(1). It can occur anywhere and does not have any geographical distribution. A typical “Pruritic, Purple, Polygonal, Planar, Papules, and Plaques”are the traditional 6 “P’s” of LP(3). It is not unusual to find typical oral lesions or cutaneous lesions only in an individual. In many instances only oral involvement may be present which is often presented as desquamative gingivitis and may precede other lesions(1, 4, 5).

2. Case Report

We are reporting this case of a 24‐years old woman who visited our clinic with complain of mild pain and burning sensation of the mouth while eating. She gives a history of getting this pain and burning sensation for more than 3 years. The pain increased with hot and spicy food and did not subside over the years. She does not have any systemic medical problems and her vitals were within the normal range. She gives a history of usage of topical

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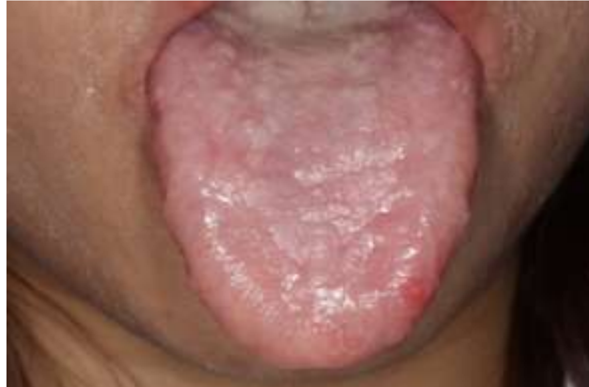
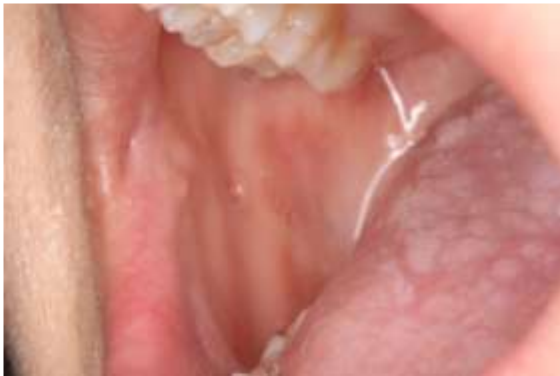
triamcinolone for a long duration of time along with multivitamins that she bought from over the counter. The extra-oral examinations revealed normal findings with symmetrical face, no swellings, rash or malar on the face. Temporo-mandibular joints were normal and there were no skin lesions.

Intra-oral examinations revealed mild erythema of the tongue with focal areas of depapillation, white striations and granular tongue with rough texture. There were no other lesions anywhere in the mouth. (Figure 1 (a) (b) and (c) below):



1(a)

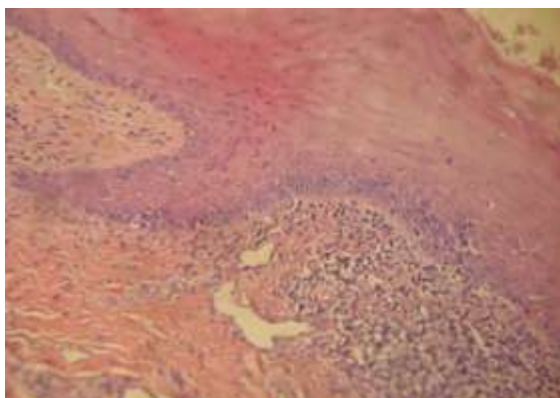


1(b)

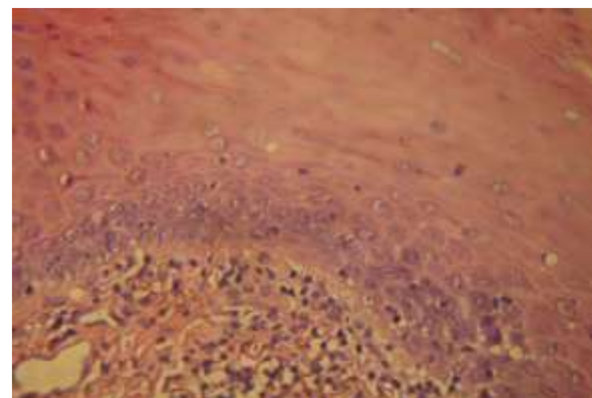
1(c)

The differential diagnosis of the lesion based on the clinical findings were Oral Lichen planus (OLP)/ Oral lichenoid lesion (OLL). However, an incisional biopsy was performed from the tongue for a histopathological examination (HPE) and direct immune-fluorescent study (DIF).

The results of HPE and DIF suggested Oral Lichen Planus. (Figure 2 (a) and (b) below):



2 HPE (a)-Low Power Field



2(b)-High Power Field

The patient was treated with systemic corticosteroid (Prednisolone), dexamethasone mouth wash and topical application of Triamcinolone Acetonide (0.1% in orabase). The patient was followed up at 2 weeks, 4 weeks and 3 monthly until the lesions were properly controlled.

3. Discussion

Oral lichen planus affects 1-2 % of the general population(6). The typical clinical features like symmetrical bilateral involvement of the oral mucosa with white striations is quite sufficient for clinical diagnosis (7). However, histopathological examination confirms the clinical diagnosis but we have to know the histologically findings are similar in OLL (2, 3, 8). It is also done to exclude lesions with dysplastic or malignant changes (7, 9). OLP affecting only the gingivae causing desquamative gingivitis is often mistaken or misdiagnosed and treated as gingivitis. It has to be understood that lichen planus of mucosa is difficult to treat and poses huge challenges to the clinicians (3). Lichenoid reaction is often used when the putative etiological factor is identified (2). Exact etiology is unknown but it can include certain factors like drugs, dental materials, Graft versus Host Disease (GVHD), hepatitis and other factors (1, 4, 10, 11). A proper knowledge therefore is imperative for timely diagnosis and management. Management of LP and LP variants are aimed to control symptoms and to decrease time from onset to resolution. The medicines most commonly used include topical corticosteroids depending on the severity and location of the lesion (2, 3, 7).Systemic corticosteroids or immune-suppressants are used in severe and recurrent cases (3, 5). Proper referral to Dermatologist, Gastroenterologist and/or Ophthalmologist as relevant for proper management of the cases is important and should be practiced in a hospital setting(3).

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