



OLGU SUNUMU/CASE REPORT

Reticular lichen planus

Retiküler liken planus

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Cukurova Medical Journal 2016;41(Suppl 1):20-24.

Abstract

Lichen planus is a chronic systemic disease that commonly involves mucosa of oral cavity . It is more common in females and often reported in middle – aged patients. The disease seems to be mediated by an antigen specific mechanism, activated cytotoxic T cells, non-specific mechanisms like mast cells degradation and matrix metalloproteinase activation. It has different variants based on morphology of lesion and site of involvement. Even though there are various lesions that resemble oral lichen planus clinically and histologically, It can be well recognized with its clinical signs and symptoms. Their symptoms may range from none, through mild discomfort to severe burning sensation. Treatment administered is mainly to resolve this symptoms and discomfort. Since it is considered a potentially malignant disorder, early diagnosis and timely management and regular follow up is very important. The objective of this paper is to report a case of reticular lichen planus and highlight on its proper management.

Key words: Lichen planus, degradation, burning sensation.

Öz

Liken planus, yaygın olarak ağız içi boğluğu mukozunun kapsandığı kronik sistemik bir hastalıktır. Bayanlarda daha yaygındır ve sıklıkla orta yaşlı hastalarda rapor edilmiştir. Bu hastalığın, sitotoksik T hücrelerinin aktive ettiği, antijene spesifik bir mekanizma ve hücre degradasyonu ve matriks metalloproteinaz aktivasyonu gibi spesifik olmayan mekanizmalar tarafından aracılık edildiği görülür. Görüldüğü bölge ve lezyonların morfolojine dayalı olarak farklı varyantları vardır. Oral liken planusa klinik ve histolojik olarak benzeyen farklı lezyonlar olsa da klinik belirtileri ve semptomlar sayesinde iyi tanımlanabilir. Semptomları, yoktan, ılımlı rahatsızlığa, şiddetli yanma hissine kadar sıralanabilir. Tedavi uygulaması semptomları ve rahatsızlığı temelde çözer. Potansiyel olarak kötü huylu bir hastalık olduğu düşünüldüğü için, erken teşhis, zaman yönetimi ve düzenli hasta takibi çok önemlidir. Bu makalenin amacı, retiküler liken planus vakasını rapor etmek ve uygun yönetimi vurgulamaktır

Anahtar kelimeler: Liken planus, degradasyon, yanma hissi.

INTRODUCTION

Lichen planus (LP) is a chronic mucocutaneous disorder of the stratified squamous epithelium that affects oral and genital mucous membranes, skin, nails, and scalp ¹. Its prevalence in the general population is around 1% to 2%, and there are a large number of cases in females ². “Pruritic, purple, polygonal, planar, papules, and plaques” are the traditional 6 “P’s” of LP³ (Table 1). 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 genital area, gastrointestinal tract, and eyes. The buccal mucosa, lips, gingivae, floor of the mouth, and palate are usually affected, in a descending order of frequency⁴. OLP is considered to have some degree of malignant tendency and is watched carefully for the same reason⁵. As it’s characterized by relapse and remissions, its management should aim at the resolution of painful symptoms, oral mucosal lesions, and the risk of oral cancer and the maintenance of good oral hygiene. In patients with

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Geliş tarihi/Received: 21.02.2016 Kabul tarihi/Accepted: 27.04.2016

the recurrent painful disease, another treatment goal is the prolongation of their symptom-free interval by continuing the treatment therapy

CASE

A 32-year-old male patient came to the department of oral medicine and radiology complaining of white appearance in the mouth since three months. The patient denied feeling pain; however, he felt esthetically disturbed. He also gave a history of burning sensation while eating spicy food. The previous medical history was non contributory. At anamnesis, the patient reported having suffered an anger episode and fretfulness, and he thought that these events influenced the appearance of the lesions and patient appeared apprehensive during examination. Considering his testimony, his emotional stress was determined to be a potential causal factor to the appearance of the lesions.

During the oral clinical exam, the presence of lesions on the left and right buccal mucosa tongue and posterior to palate was observed (Figure 1); no additional lesions were observed on his body. These lesions were diverse in size and were white papules with normal consistence from the tissue. The lesions did not show mobility or secondary signals that could be added to the description; no ulcer was present. In view of the facts, the clinical diagnosis was lichen planus, and, in order to confirm the diagnosis by microscopical exam, the patient was submitted to incisional biopsy of the right buccal mucosa.

Table 1. Clinical presentations of lichen planus²⁴

1. Reticular
2. Erosive
3. Atrophic
4. Plaque-like
5. Papular
6. Bullous

The microscopic examination was done under H & E sections which showed epithelium and connective tissue stroma, epithelium was stratified squamous type, thin with sharp rete ridges. Degeneration of basement membrane is evident with band of inflammatory cells beneath the epithelium. Underlying connective tissue with bundles of collagen fibers and blood capillaries were observed. The patient was treated topically with 0.1% Triamcinolone acetone ointment (Tess 1%

ointment) for fifteen days for regression of the lesions. patient reported back to department after fifteen days and on clinical examination, lesion appeared regressed but patient was very anxious about the condition, so we prescribed Tab. Anxit 0.5 mg (Alprazolam 0.5 mg) for fifteen days. Patient didn't turn up for further treatment but he responded through phone calls saying improvement in symptoms.

DISCUSSION

The word of lichen planus is derived from the Greek word "leichen" means tree moss and Latin word "planus" means flat⁶. Lichen planus is a chronic T-cell mediated autoimmune disease, which affects the oral mucosa, skin, genital mucosa, scalp, and nails⁷. OLP, the mucosal counterpart affects 0.5-2.0% of the general population and often seen in the fifth to sixth decades of life. The lesion is frequently seen in women^{8,9}. Since it is considered a potentially malignant disorder, early diagnosis with timely management and regular follow-up is very important to avoid further complications. However, the incidence of malignant transformation in OLP has been fairly low^{10,11}. Table 2 shows the etiology and pathogenesis of LP.

Reticular LP has a fine asymptomatic interwine lace-like pattern called "Wickham striae" in a bilateral symmetrical form and involves the posterior mucosa of the cheek in most cases. Erosive LP is a symptomatic lesion often surrounded by fine radiant keratinized striae with a network appearance. Atrophic LP exhibits diffuse red lesions and it may resemble the combination of two clinical forms, such as the presence of white striae characteristic of the reticular type surrounded by an erythematous area. Plaque like LP exhibit whitish homogeneous irregularities similar to leukoplakia, it mainly involves the dorsum of tongue and the mucosa of the cheek. Papular LP are present with small white papules with fine striae in the periphery. Bullous lichen planus shows blisters that increase in size and tend to rupture, leaving the surface ulcerated and painful Nikolsky's sign may be positive. Reported case shows reticular LP features on left and right buccal mucosa and plaque type on tongue.

Our reported case also exhibited signs and symptoms like burning sensation and lacy web like white threads that are slightly raised with no

evidence of papules on the skin surface.

The diagnosis of OLP is based on clinical and histopathological findings. Classic histopathologic features include the presence of a lymphocytic infiltrate in the subepithelial region in band-like

patterns, liquefactive degeneration of the basal layer, Civatte’s bodies, which are the presence of numerous eosinophilic colloid bodies along with interface-epithelial tissue packs, variable degrees of focal ortho or parakeratosis and irregular acanthosis^{25,26}.

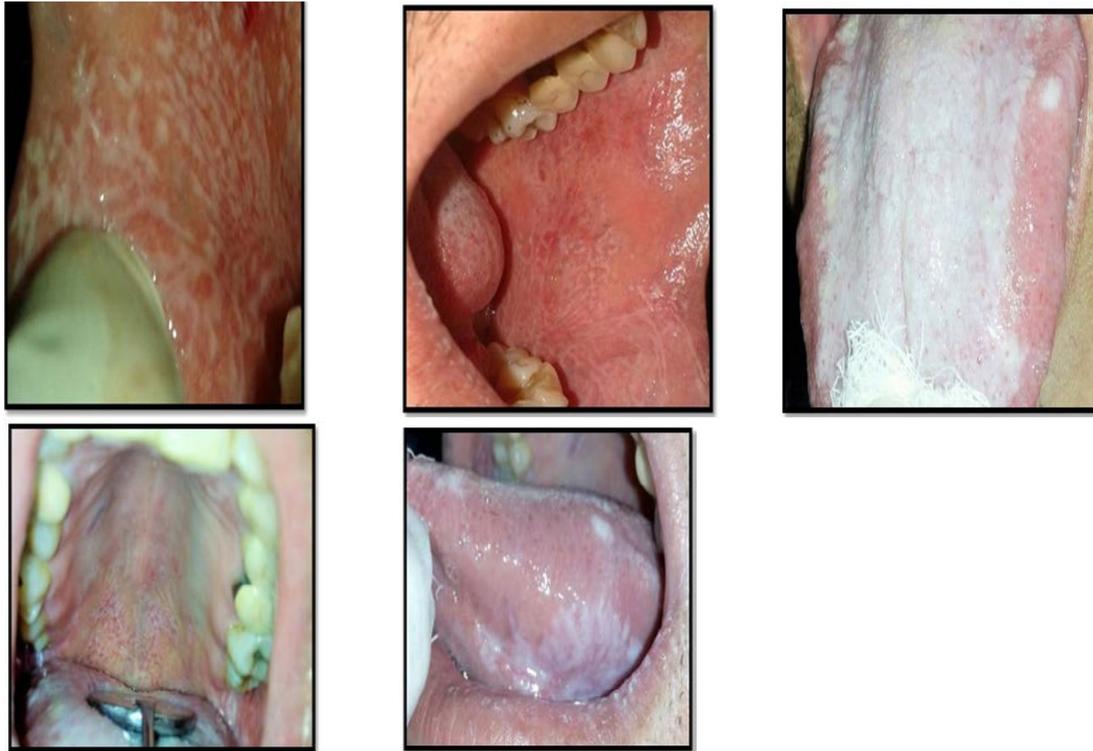


Figure 1 . Presence of lesions on the left and right buccal mucosa tongue and posterior to palate

Table 2. Etiology and pathogenesis of lichen planus.

Genetic background ¹²	<pre> graph TD A[Unknown antigen change in oral mucosa] --> B[Focal Accumulation of Langerhan's cells within the epithelium²³] B --> C[Activated Helper/inducer T lymphocyte in the lamina propria] C --> D[Expression of ICAM and HLA- DR in the on the surface of keratinocytes] D --> E[Influx of cytotoxic or suppressor T-cells within the epithelium] E --> F[Keratinocyte damage] E --> G[Pyknotic and shrunken basal cells (Civatte bodies)] F --> H[Basal cell degeneration] H --> I[Apoptosis ofkeratinocytes] I --> J[Colloid bodies(underlying dermis)] I --> K[Failure of phagocytosis of apoptic cells] K --> J </pre>
Dental materials ¹³	
Drugs ¹⁴	
Infectious agents ¹⁵	
Autoimmunity ¹⁶	
Bowel disease ¹⁷	
Stress ¹⁸	
Habits ¹⁹	
Trauma ²⁰	
Diabetes and hypertension ²¹	
Malignant neoplasm ²²	

LP is characterized by relapse and remissions, so its management should aim at the resolution of painful symptoms, oral mucosal lesions, the risk of oral cancer and the maintenance of good oral hygiene²⁷. A wide variety of therapeutic modalities have been employed to treat oral lichen planus which include corticosteroids²⁸, retinoids and its derivatives²⁹, immunosuppressors like cyclosporine, levamisole and azathioprine^{30,31}, antifungal agents like griseofulvin and PUVA therapy³².

These agents are either prescribed alone or in combination, the choice purely depends on

clinicians judgment. Treatment options has been summarized in the below Table 3 based on severity. OLP is a disease that results from CD8+T Cell – mediated apoptosis of basal keratinocytes in response to an unknown endogeneous/ at times a known exogeneous antigen. Relief can be achieved in most of patients with topical steroids alone in a combination with other immunomodulatory topical agents. Infrequently patient require prolonged use of systemic medication. The risk of malignancy is controversial but regular surveillance is advisable with biopsies of suspicious areas recommended to detect early dysplastic changes.

Table 3. Management of lichen planus

Stages	Treatment	Drugs
PRIMARY (mild to moderate)	Periodic checkup, reassurance Anti- anxiety drugs analgesics	Orabase ointments
	Topical steroids	Clobetasol proprionate gel 0.05% Betamethasone valerate gel 0.1% Flucocinamide gel 0.05% Clobetasol butyrate ointment 0.05% Triamcinolone ointment 0.1%
	Topical Immunosuppressant	cyclosporine 0.025% Tacrolimus 0.1% Pimecrolimus 1% Retinoids Dapsone 5.5%
	Topical steroid with Immunosuppressant	levamisole Cyclosporine Dapsone
	Natural Remedies	Lycopene 8mg/kg Curcumin Green Tea Aloevera
SECONDARY (moderate to severe)	Systemic steroids	1.5 – 2 mg/kg/day prednisone for 10 days
	Systemic Immunosuppressant	1 – 2 mg/kg/day cyclosporine levimasole 50 mg 3times for 3 days for 4-6 weeks Azithropine 50 mg Dapsone 25-50mg
	Steroid+systemic Immunosuppressants	
TERTIARY (very severe)	Intra lesional stero id injection	0.2- 0.4 ml of 10mg/ml solution of triamcinolone acetonide
OTHERS	PUVA Therapy	
	Photodynamic therapy	
	Surgery and Laser	

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