



Case Report

Erosive lichen Planus of Gingiva – A case Report

Ramesh Gupta^{1,*}, Meenu Garg², Soni Gupta³, Nishi Gupta⁴

¹Dept. of Oral Medicine & Radiology, Sudha Rustagi Dental College & Hospital, Faridabad, Haryana, India

²Dept. of Prosthodontics, Sudha Rustagi Dental College & Hospital, Faridabad, Haryana, India

³Dept. of Aesthetic Physician & Hair Transplant, Specialty Hospital, Saket, New Delhi, India

⁴Senior General Practitioner Al Ain, U.A.E



ARTICLE INFO

Article history:

Received 23-07-2020

Accepted 02-09-2020

Available online 03-10-2020

Keywords:

Erosive

Lichen Planus

Gingiva

ABSTRACT

Oral Lichen Planus (OLP) is a common chronic immunological inflammatory mucocutaneous disorder that varies in appearance from keratotic (reticular or plaque like) to erythematous and ulcerative. The erosive form of OLP manifests as a mixture of erythematous and ulcerated areas bounded by finely radiating keratotic striae. Treatment should be directed at achieving specific goals after considering the degree of clinical involvement. Reticular lesions that are asymptomatic generally require no therapy. All treatment should be aimed at eliminating atrophic and ulcerative lesions, alleviating symptoms, and potentially decreasing the risk of malignant transformation. Relief of painful symptoms can be obtained with mid potency topical corticosteroids. Systemic corticosteroids are, usually reserved for cases where topical approaches have failed, where there is recalcitrant, erosive, or erythematous OLP, or for widespread OLP when skin, genitals, esophagus, or scalp are also involved.

© 2020 Published by Innovative Publication. This is an open access article under the CC BY-NC license (<https://creativecommons.org/licenses/by-nc/4.0/>)

1. Introduction

Oral Lichen Planus (OLP) is a common chronic immunological inflammatory mucocutaneous disorder that varies in appearance from keratotic (reticular or plaque like) to erythematous and ulcerative. The sites involved over the skin include the flexor surfaces of the legs and arms, especially the wrists and elbows and Scalp.^{1,2} The erosive form of OLP manifests as a mixture of erythematous and ulcerated areas bounded by finely radiating keratotic striae. Unlike the keratotic variants such as reticular and plaque type lesion, Erosive Oral Lichen Planus (EOLP) presents with symptom ranging from intermittent mild pain to severe discomfort and carries an increased risk of malignant transformation.^{3,4}

2. Case Report

A 50 years old female, patient reported to the department of Oral Medicine and Radiology with a chief complaint of bleeding from gums and a reddish white patch in the mouth since 5-6 months. She noticed a reddish white patch in left buccal mucosa with a history of intense burning sensation while eating spicy food.

On clinical examination reddish white erythematous area was present on the left posterior buccal mucosa along the occlusal plane measuring approximately 3x3 cm extending from mesial of 36 region up to the retro ramus region anteroposterior and inferiorly from the lower buccal vestibule to 1cm superiorly above the occlusal plane. The lesion has white feathery keratotic border, the surface is granular and bright red in color. Lesion was nonscrapable, non tender; borders slightly raised from surrounding mucosa & were hyperkeratotic with a velvety texture (Figure 1).

There was bleeding from the lesion on slightest of the provocation. Gingiva was bright red, edematous;

* Corresponding author.

E-mail address: romesh_gupta2002@yahoo.com (R. Gupta).

desquamation and erythema present on labial gingiva w.r.t upper anterior teeth. (Figure 2). On the basis of history, provisional diagnosis of Oral Lichen Planus-Erosive Variant was given.

Incisional biopsy was done to rule out other vesicobullous lesion such as Pemphigus Vulgaris, Mucous Membrane Pemphigoid which also show desquamative gingivitis (Figure 3). Histopathologic examination revealed hyperparakeratinized stratified squamous epithelium which is showing saw tooth shaped rete pegs at places. There is presence of basal cell layer degeneration with band like infiltration of chronic inflammatory cells mainly lymphocytes at subepithelial region. Based on all the above features final diagnosis of erosive OLP was given. Treatment was planned and first patient counseling was done. Tab Prednisolone (20mg) swish and throw along with the topical application of Clobetsaol (0.05%) three to four times in a day cream for 15 days was given patient reported thereafter for follow up (Figures 4 and 5).



Fig. 2: Desquamative Gingivitis



Fig. 1: Erosive lesion on buccal mucosa



Fig. 3: Incisional biopsy from the borders of the lesion

3. Discussion

Oral Lichen Planus is a common chronic immunological inflammatory mucocutaneous disorder that varies in appearance from keratotic (reticular or plaque like) to erythematous and ulcerative. There are several contributing factors like HLA antigen, Dental Materials, Infectious Agents Gram negative anaerobic bacillus Spirochetes and Stress.⁵ OLP has a correlation between diabetes, hypertension (Grinspan syndrome), Hepatitis C Virus, Celiac disease and with other immune mediated diseases like Alopecia areata, Dermatomyositis, Myasthenia gravis. OLP is more common in middle aged females. 28% of OLP have skin lesions with SIX “P” presentations Planar, Polygonal, Purple, Pruritic, Papules & Plaques.⁵



Fig. 4: Follow up showing healing of the lesion on buccal mucosa



Fig. 5: Partial healing of the Desquamative Gingivitis

When lichen Planus involves scalp it is associated with Graham-little syndrome (lichen planopilaris), with Nail it is associated with Onychorrhexis. Another term associated with LP Koebner's Phenomenon is appearance of fresh lesion on scratch marks. Oral lesions in LP are chronic, rarely undergo spontaneous remission, and potentially premalignant.⁶ Common sites of OLP are buccal mucosa, tongue, lips, gingiva, floor of mouth and palate with a symptom of burning sensation of oral mucosa. Reticular, Papular, Plaque, Atrophic, Bullous are different types OLP. Reticular OLP is the Common type. Erosive OLP has central ulceration of varying degrees is seen. Periphery of lesion is usually bordered by fine, white radiating lines (Wickham's Striae). Gingival involvement in EOLP produces desquamative gingivitis; it is always symptomatic with pain & burning sensation of involved area.⁷

Usually a complete history, biopsy immunofluorescent studies are done to diagnose LP with HCV test. Malignant transformation of OLP is 3.7%. Treatment should be directed at achieving specific goals after considering the degree of clinical involvement. Reticular lesions that are asymptomatic generally require no therapy. All treatment should be aimed at eliminating atrophic and ulcerative lesions, alleviating symptoms, and potentially decreasing the risk of malignant transformation. Hypersensitivity reactions should be suspected when the lichenoid lesions are confined to oral mucosal sites in close proximity to dental restorations. An optimal oral hygiene program should be instituted in patients with gingival disease.^{8,9}

Relief of painful symptoms, can best be achieved with regular use of benzydamine hydrochloride (0.15%) or apply 2% lidocaine gel to painful areas and rinse with mid potency topical corticosteroids: Triamcinolone acetonide (0.1%), Betamethasone or Prednisolone up to 4 times daily, Clobetasol ointment (0.05%) applied to painful areas 3-4 times daily to modulate inflammation and immune

response are effective in most patients. In case of painful gingival lesions topical steroids can be applied through soft custom trays. Topical corticosteroids are safe when applied to mucous membranes for short interval.^{6,8} A usual course of steroid therapy should not exceed 10-14 days, with an interim period approximately the same before re-instituting the steroid therapy. Other topical agents more potent immunosuppressant's or immunomodulatory agents such as calcineurin inhibitors (cyclosporine, tacrolimus, or pimecrolimus) or retinoids can also be used.^{9,10}

Systemic corticosteroids are, usually reserved for cases where topical approaches have failed, where there is recalcitrant, erosive, or erythematous OLP, or for widespread OLP when skin, genitals, esophagus, or scalp are also involved.

Prednisolone 40 to 80 mg daily is usually sufficient to achieve a response. It should be taken either for brief periods of time (5–7 days) and then the dose should be reduced by 5–10 mg/day gradually over 2–4 weeks. Adverse effects may be minimized if patients can tolerate the same total dose on alternate days.^{6,10}

4. Conclusion

The term OLP belongs to heterogeneous group mucosal disease, Treatment should be directed at achieving specific goals after considering the degree of clinical involvement. Alleviating symptoms in most of patients with topical steroids alone or in combination with other immunomodulatory topical agents, thereby decreasing the risk of malignant transformation. Patient should also be kept under long-term follow up due to malignant tendency of LP. Treatments are usually nonspecific and directed in decreasing the inflammation and therefore there is no complete cure of the disease.

5. Source of Funding

None.

6. Conflict of Interest

None.

References

1. Usatine RP, Tinitigan M. Diagnosis and treatment of lichen planus. *Am Fam Physician*. 2011;84:53–60.
2. Sharma SC, Saimbi CS, Koirala B. Erosive Oral Lichen Planus and its Management: A Case Series. *J Nepal Med Assoc*. 2008;47(170):86–90.
3. Edwards PC, Kelsch R. Oral lichen planus: Clinical presentation and management. *J Can Dent Assoc*. 2002;68:494–9.
4. Burket LW, Greenberg MS, Glick M. *Burket's Oral Medicine: Diagnosis & Treatment*. Hamilton: BC Decker; 2003.
5. Carozzo M, Thorpe R. Oral lichen planus: a review. *Minerva Stomatol*. 2009;58(10):519–37.
6. Chamani G, Rad M, Zarei MR, Lotfi S, Sadeghi M, Ahmadi Z, et al. Efficacy of tacrolimus and clobetasol in the treatment of oral

- lichen planus: a systematic review and meta-analysis. *Int J Dermatol.* 2015;54(9):996–1004.
7. Kloth MI, Chatra L. Oral erosive lichen planus-A case report and review on the management. *IOSR J Dent Med Sci.* 2016;15(6):82–6.
 8. Farhi D, Dupin N. Pathophysiology, etiologic factors, and clinical management of oral lichen planus, part I: facts and controversies. *Clin Dermatol.* 2010;28(1):100–8.
 9. Neville BW, Damm DD, Allen CM, Bouquot JE. *Oral & Maxillofacial Pathology*; 1995.
 10. Sugarman PB, Savage NW. Oral lichen planus: Causes, diagnosis and management. *Aust Dent J.* 2002;47:290–7.

Meenu Garg Professor

Soni Gupta Consultant – Dermatologist

Nishi Gupta Senior General Practitioner

Cite this article: Gupta R, Garg M, Gupta S, Gupta N. Erosive lichen Planus of Gingiva – A case Report. *IP Indian J Clin Exp Dermatol* 2020;6(3):294-297.

Author biography

Ramesh Gupta Reader & Head