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EROSIVE LICHEN PLANUS – A CASE REPORT

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Abstract :
A 55 year old female patient reported with a chief complaint of burning sensation of the mouth and ulcerations in the left and right buccal mucosa after tooth extraction, following which patient was subjected to incisional biopsy from the right buccal mucosa region in relation to 45.46 region and was diagnosed to be having Erosive Lichen Planus. Treatment was initiated and patient had significant improvement of symptoms after 2 weeks of follow up. Here we report the case and review current modalities in the management of erosive oral lichen planus (OLP).

keywords : Lichen planus , autoimmune disease , burning sensation.

INTRODUCTION

The mouth serves as a sentinel or early warning system, reflecting both health and illness. The mouth cavity is often seen as a window into the body due to the fact that many systemic disorders have oral signs.[3] Oral involvement frequently occurs before other symptoms or lesions at other sites manifest.[2] Oral lichen planus is a chronic inflammatory mucocutaneous disorder that is T-cell mediated. Prevalence of oral lichen planus in Indian population is 2.6% [1].Women have higher predisposition to oral lichen planus and the condition is seen at the peak age of 30–60 years. Commonly seen variant of oral lichen planus is reticular type whereas erosive type of lichen planus is the second most common type.[1,2]

Aim: This paper reports a case of lichen planus in the right and left buccal mucosa , tongue who was treated with corticosteroids .

CASE REPORT

A 55 year old female patient reported to the Department of Oral Medicine and Radiology, Sree Balaji Dental College and hospital with a chief complaint of burning sensation and ulcerations for past 1 week post extraction in the left and right buccal mucosa . Her past medical history revealed that she is under siddha medication for vitilo for past 5 years . The patient felt that the ulcertions occurred one week post extraction . No significant family history. She is a housewife and non vegetarian diet . She brushes her teeth once daily in horizontal motion using toothbrush and toothpaste. No adverse oral or parafunctional habits. General physical examination revealed that she was moderately built and nourished. A review of her systems was done and no abnormalities were seen.. Extra orally ,diffuse pigmentation present in the upper and lower limb , face , and over the lips due to vitilgo .

The erosive and ulcerative lesions produced by the epithelial necrosis in the oral cavity caused acute pain in contact with food or fluids, which made feeding difficult. Patient reported with burning sensation of oral mucosa Acute multiple oral mucosal ulcers in the right and left buccal mucosa (figure1)were present due to extensive degeneration of basal cell layer of epithelium. The surface was granular and brightly erythematous and may bleed upon slight provocation. Ulcerated area evident and presence of a fibrin network or pseudomembrane over the ulcer. (Figure 1). Incisional biopsy was taken in the right buccal mucosa and histopathology report was obtained . Histopathology report confirmed to be lichen planus .

Treatment was started for the patient . During the 1st visit of the lesion occurred , oral corticosteroids was administered . After biosy and histopathology confirmation , patient was started with low dose steroid (6times per day) . Treatment was performed using a high dose of oral steroids in which improvement were observed within 3 week and the lesions was healed . (Figure 2)

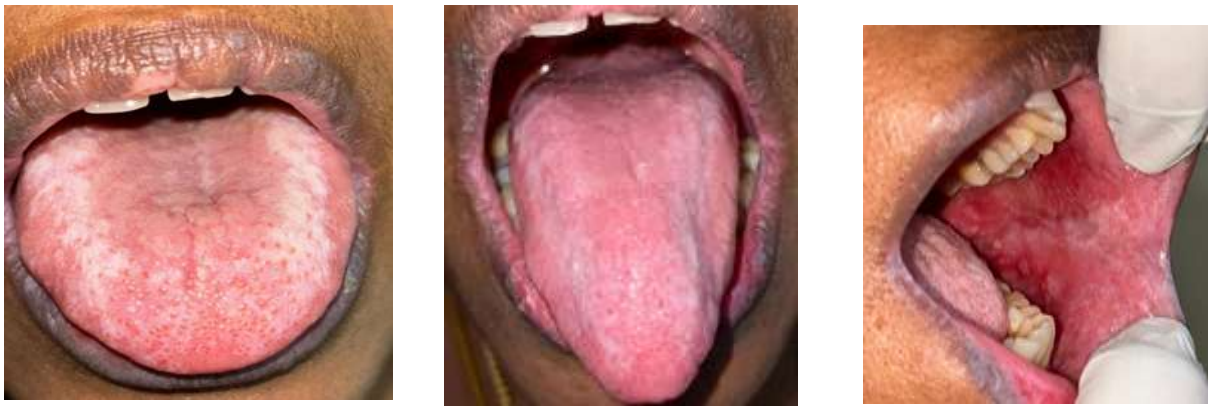
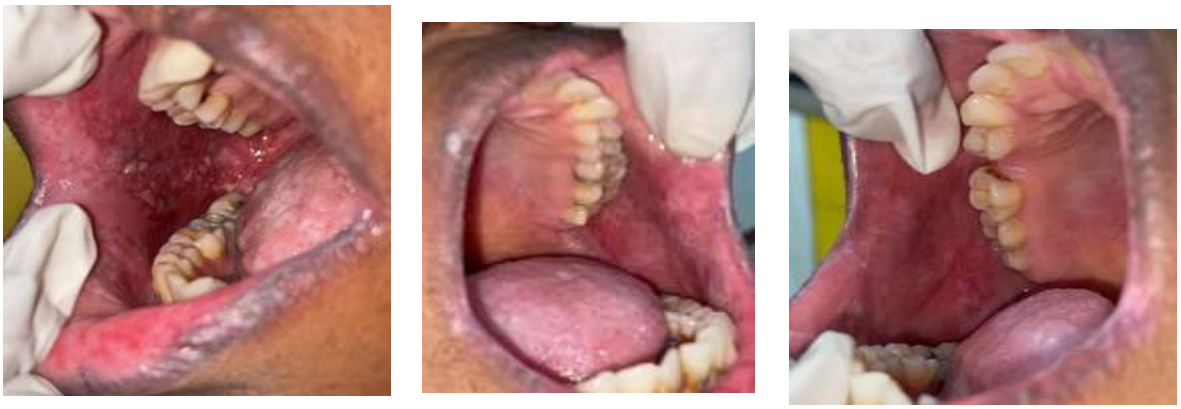


FIGURE 1 Lichen planus evident on the left and right buccal



Lichen planus present on the right and left buccal mucosa . Administration of oral steroids with 5 visits of follow up .

DISCUSSION

Lichen planus is an inflammatory autoimmune disease . In adult patients, it is the most common non-infectious illness of the oral mucosa. Only 17% of the afflicted individuals fully recover, while 39% of instances with OLP lesions have been documented to experience remissions. Although the precise cause of this illness is unknown, stress, medications, dental fillings, immunity, and hypersensitivity responses might all have a role in its development. T-cells, mostly CD8-positive T-cells, mediate OLP by releasing many cytokines, including tumour necrosis factor alpha (TNFα) and interleukin-12 (IL-12), which disrupt the integrity of the basement membrane. [5]

Additional lesions affecting the skin or other mucosal areas may occur in OLP patients. In around 5% of cases of OLP, skin lesions will appear. The flexor area of the forearm is the most common location for lesions of this type, however they can as commonly occur on the legs, back, and chest. The cutaneous lesions, which often appear many months after the oral lesions, are polygonal, violaceous, flat-topped, erythematous papules covered in a web of thin lines called Wickham striae.

The clinical phenomenology and HP components serve as the foundation for the OLP diagnosis. Clinically, the lesions often manifest as numerous, bilateral lesions that occur across the oral cavity. [1]. Traditionally, the distribution of OLP is symmetrical, featuring distinct white striations on a somewhat erythematous backdrop that often affects the buccal mucosa and tongue. Several types of lesions were observed in additional clinical trials, including papular, erosive, atrophic, and bullous-like lesions. [2] .As a result, the interdependent processes between B- and T-lymphocytes may play a role in the pathogenesis of OLP. It is a complicated pathology that is

challenging to treat. Corticosteroids have been found to be the most predictable and successful agents in treatment of oral lichen planus.

CONCLUSION

OLP is an immunological mucocutaneous illness with uncertain aetiology. Proper identification of lesions with biopsy, HP, and IHC analysis can enhance therapy.
In this case , corticosteroids drugs led to positive clinical outcomes. Additional research is needed to further understand the disease's aetiology and optimise therapy options.

REFERENCES

1 Babu A, Chellaswamy S, Muthukumar S, Pandey B, Jayaraj M, Francis S. Bullous Lichen Planus: Case Report and Review. J Pharm Bioallied Sci. 2019 May;11(Suppl 2):S499-S506. doi: 10.4103/JPBS.JPBS_58_19. PMID: 31198396; PMCID: PMC6555375.
2 Gupta S, Jawanda MK. Oral Lichen Planus: An Update on Etiology, Pathogenesis, Clinical Presentation, Diagnosis and Management. Indian J Dermatol. 2015 May-Jun;60(3):222-9. doi: 10.4103/0019-5154.156315. PMID: 26120146; PMCID: PMC4458931.
3 Mehrotra V, Devi P, Bhovi TV, Jyoti B. Mouth as a mirror of systemic diseases. Gomal Journal of Medical Sciences. 2010 Dec 31;8(2).
4 Chiriac A, Foia L, Chiriac AE, Ancuţa C, Manea P, Profire L, Filip F. Lichen planus secondary complications associated with the use of biologic therapy for rheumatoid arthritis. Rom J Morphol Embryol. 2013;54(3 Suppl):829-31. PMID: 24322035.
5 Chaitanya NC, Chintada S, Kandi P, Kanikella S, Kammari A, Waghamare RS. Zinc Therapy in Treatment of Symptomatic Oral Lichen Planus. Indian Dermatol Online J. 2019 Mar-Apr;10(2):174-177. doi: 10.4103/idoj.IDOJ_230_18. PMID: 30984596; PMCID: PMC6434769.
6 Alsarraf A, Mehta K, Khzam N. The Gingival Oral Lichen Planus: A Periodontal-Oral Medicine Approach. Case Rep Dent. 2019 Jan 6;2019:4659134. doi: 10.1155/2019/4659134. PMID: 30723556; PMCID: PMC6339732.
7 Scrobotă I, Mocan T, Cătoi C, Bolfă P, Mureşan A, Băciuţ G. Histopathological aspects and local implications of oxidative stress in patients with oral lichen planus. Rom J Morphol Embryol. 2011;52(4):1305-9. PMID: 22203938.
8 Baderca F, Lighezan R, Alexa A, Zăhoi D, Raica M, Izvernariu D, Ardelean L. Atypical variant of lichen planus mimicking normal skin histology. Rom J Morphol Embryol. 2011;52(4):1355-60. PMID: 22203946.
9 Maehara T, Moriyama M, Kawano S, Hayashida JN, Furukawa S, Ohta M, Tanaka A, Yamauchi M, Ohyama Y, Kiyoshima T, Nakamura S. Cytokine profiles contribute to understanding the pathogenic difference between Good syndrome and oral lichen planus: two case reports and literature review. Medicine (Baltimore). 2015 Apr;94(14):e704. doi: 10.1097/MD.0000000000000704. PMID: 25860215; PMCID: PMC4554038.
10 Popovska M, Grchevska L, Popovski V, Atanasovska-Stojanovska A, Minovska A, Belazelkoska Z, Radojkova-Nikolovska V, Mitik K, Strezovska S. T-cell subpopulations in lesions of oral lichen planus. Pril (Makedon Akad Nauk Umet Odd Med Nauki). 2013;34(2):143-9. PMID: 24280888.
11 Maloth AK, Dorankula SP, Pasupula AP, Thokala MR, Muddana K, Ramavath R. A Comparative Immunohistochemical Analysis of Langerhans Cells in Oral Mucosa, Oral Lichen Planus and Oral Squamous Cell Carcinoma. J Clin Diagn Res. 2015 Jul;9(7):ZC76-9. doi: 10.7860/JCDR/2015/14170.6235. Epub 2015 Jul 1. PMID: 26393210; PMCID: PMC4573043.