

PHOTOBIOMODULATION AS A ADJUVANT WITH CORTICOSTEROID IN THE MANAGEMENT OF ORAL LICHEN PLANUS- CASE SERIES

DR NIVETHA.K

POST GRADUATE, DEPARTMENT OF ORAL MEDICINE AND RADIOLOGY, SREE BALAJI DENTAL COLLEGE AND HOSPITAL, CHENNAI.

DR NALINI ASWATH M.D.S

HEAD OF THE DEPARTMENT, DEPARTMENT OF ORAL MEDICINE AND RADIOLOGY, SREE BALAJI DENTAL COLLEGE AND HOSPITAL, CHENNAI.

DR SANKAR NARAYANAN R M.D.S

READER, DEPARTMENT OF ORAL MEDICINE AND RADIOLOGY, SREE BALAJI DENTAL COLLEGE AND HOSPITAL, CHENNAI.

ANGEL JENIFER A

SAVEETHA MEDICAL COLLEGE, SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES

ABSTRACT:

The cases of male and female patients reported with the chief complaint of burning sensation in the cheek region for past one week. The clinical findings present as bilateral, symmetrical lesions affecting the buccal mucosa. After the clinical assessment, the diagnosis of oral lichen planus was established, and a therapy plan was conducted. The therapy involves low level laser therapy as a adjuvant with corticosteroid. We observed a favorable clinical evolution after the application of low Level laser with corticosteroids.

Keywords Oral lichen planus, Photobiomodulation, Topical steroid, Diode laser

INTRODUCTION:

About 1%–2% of middle-aged people have oral lichen planus (OLP), a chronic inflammatory mucocutaneous illness that is more common in women [1, 2]. Usually affecting the buccal mucosa, gingiva, dorsum, and borders of the tongue, it presents as bilateral, symmetrical lesions [3]. Atrophic, reticular, plaque-like, erosive/ulcerative, papular, and bullous are some of the several clinical patterns associated with OLP. In a clinical setting, any one of these patterns may appear alone or together. Reticulated OLPs are the most prevalent type, however. Wickham's striae, which are interwoven striae in addition to hyperkeratotic plaques and papules, are clinically distinguishing features of the condition, which is typically asymptomatic [4]. Five characteristics of LP's cutaneous lesions are purple, polygonal, pruritic papules, and plaque. OLP usually presents with a cutaneous and mucosal eruption at first, although it can also occasionally present with oral or nail findings alone. LP often starts as distinct, flat-topped papules that range in dimension from 3 to 15 mm. These papules may eventually combine to form bigger plaques. They appear red in the early stages of the illness, but they rapidly develop a violaceous or reddish-purple hue [5]. Currently, the main objectives of OLP therapy are to maintain proper oral hygiene, reduce the risk of oral cancer, relieve painful symptoms, and treat lesions of the oral mucosa. As a preventative strategy, get rid of the local aggravating elements. Various treatments for OLP have been reported thus far, such as medication therapy, surgery, psoralen with ultraviolet light A (PUVA), and laser. For the treatment of OLP, various medications have been applied topically and systemically [5].

AIM: This presentation reports a case series of lichen planus in the right and left buccal mucosa was treated with photobiomodulation a adjuvant with corticosteroids.

CASE 1:

A 44-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 for past one week in the right and left buccal mucosa. No significant medical history. she is nonvegetarian diet.no adverse oral habits. General examination revealed that she was moderately built and nourished. A review of her systems was done and No abnormality detected. The reticular lesions produced by epithelial changes in the oral cavity caused burning sensation while

eating spicy foods. Intraoral examination revealed healthy dentition and periodontium. The examination was notable for fine, white, lace-like lines of the right and left buccal mucosa (Fig. 1). The lesions did not wipe off and were not tender to palpation or manipulation. The remainder of the intraoral findings were unremarkable. A thorough head and neck examination and evaluation of the patient's exposed skin were non-contributory. The patient was given the clinical diagnosis of reticular lichen planus. The patient was educated about the condition and his clinical diagnosis was documented. The risks and benefits of the procedure were discussed.



Fig 1 a-pre op:



b-photobiomodulation



c-post op

CASE 2:

A 45- year- old male patient reported to the Department of Oral medicine and Radiology, Sree Balaji dental college and hospital with a chief complaint of burning sensation for past one week in the right and left buccal mucosa. No significant medical history. He is non vegetarian diet.no adverse oral habits. General examination revealed that she was moderately built and nourished. A review of her systems was done and No abnormality detected. The reticular lesions produced by epithelial changes in the oral cavity caused burning sensation while eating spicy foods. Intraoral examination revealed healthy dentition and periodontium. The examination was notable for fine, white, lace-like lines of the right and left buccal mucosa(fig:2). The lesions did not wipe off and were not tender to palpation or manipulation. The remainder of the intraoral findings were unremarkable. A thorough head and neck examination and evaluation of the patient's exposed skin were non-contributory. The patient was given the clinical diagnosis of reticular lichen planus. The patient was educated about the condition and his clinical diagnosis was documented. The risks and benefits of the procedure were discussed.



Fig:2 A B C A-preop



B-photobiomodulation therapy:



C-post op

DISCUSSION:

Since there is no known treatment for OLP, a chronic mucocutaneous disorder, long-term care is required to control symptoms.[6] There are various therapeutic modalities for OLP. Topical corticosteroids are recommended in addition to intralesional and systemic corticosteroids since OLP is an immune-mediated disorder. Additional medications include systemic or topical retinoids, oral metronidazole, and immunosuppressants (such tacrolimus and cyclosporine) [7]. Eliminate the local aggravating elements as a precaution. As of right now, a number of OLP treatments have been documented, including lasers, psoralen with ultraviolet light A (PUVA), pharmaceutical therapy, and surgery. The most widely used method of treating OLP is cutting-edge drug therapy. Several drugs have been used both locally and systemically as treatments for OLP. Topical corticosteroid medicines are administered.

CONCLUSION:

Photobiomodulation could be a promising therapeutic modality for management of erosive oral lichen planus without the side effects of steroid therapy. Each of the treatment models has a positive effect in the control of the main symptoms of OLP. No scar formation was observed after the laser treatments.

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