

International Journal of Research Publication and Reviews

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

Oral Premalignant Lesion-Oral Leukoplakia with Fungal Infection (Case Report)

Dr. Thirumal Rao¹, Dr. B. Anil², Dr. B.Sujith Anand³, Dr. Arif Mohiddin⁴*,

¹M. D. S (Prosthodontics), Senior lecturer, Adhiparaskthi Dental college & Hospital, Chennai

²M. D. S (Oral Surgery), Vishnu Dental college, Andhra pradesh.

³M. D. S (Public -Health Dentistry), ANIDS college, Visakhapatnam, Andhra pradesh

⁴M. D. S (Oral Pathology), IPGMER, KOLKATA, west Bengal.

Corresponding Author:-

Dr. ArifMohiddin, M. D. S (Oral Pathology) IPGMER, KOLKATA, west Bengal. Email:- arifmohiddin09@gmail.com. (contact:-+91-8466811746.)

ABSTRACT:-

If not detected early, leukoplakia is the most common premalignant or potentially malignant lesion of the oral mucosa. Candida's predisposing component in leukoplakia has recently become a source of debate. The fungus Candida albicans intrusion was found to be related to certain clinical attributes, such as tissue injury, size of the lesion, location in the oral cavity, dysplastic changes, and tobacco use, and it was found to be associated with certain clinical attributes, such as tissue injury, size of the lesion, site in the oral cavity, dysplastic changes, and tobacco use. To control this illness, a variety of treatment approaches are used, including antioxidant therapy, carotene supplements, and antifungal medications.

Keywords:- Leukoplakia, Candida, Oral Premalignant lesion.

Introduction:-

Oral lesions that are premalignant or precancerous (also known as "possibly malignant") concern the mouth's lining (known as the epithelium) and are at danger of becoming (transforming into) oral cancer. Leukoplakia is a white lesion of the oral mucosa that cannot be classified as any other type of lesion; certain oral leukoplakias might progress to malignancy.¹ Candida-associated leukoplakia vs. Candida-associated hyperplastic candidiasis Premalignant lesions of the oral cavity that may progress to malignancy are referred to as potentially malignant illnesses by the WHO (PMD)². Leukoplakia, erythroplakia lichen planus, OSMF, and actinic cheilitis are five forms of oral lesions that have been classified as potentially malignant illnesses.^{3,10}

Case Report:-



Figure 1(Pre treatment)

A 32-year-old female patient with a white spot on the left posterior buccal mucosa presented to the Dentat department. On inspection, a homogeneous white patch measuring 2.5cm x 4.5cm on the left posterior buccal mucosa was discovered while cleaning the patient's teeth, and the patient experiences a burning sensation when eating. The surface appeared to be fractured mud. The lesion was not sensitive, and it could not be scraped. The patient was addicted to smoke and alcohol. Scrapable in some sections, a provisional diagnosis of leukoplakia was considered.

Pathophysiology

Stratified squamous epithelium lines the mouth cavity. Tobacco, alcohol, and viral exposure can cause hyperkeratotic epithelium to develop. Oral leukoplakia is the clinical manifestation of this condition. These disorders have varying rates of development to cancer, although dysplastic epithelium can be found in any of them, emphasizing the importance of histological assessment.¹¹

Discussion:

Candida infection played a crucial etiological role in persons diagnosed with Oral leukoplakia, according to Roed-Petersen and Daftary in 1972. The clinical kinds and histological dysplasias have also been investigated, as it has been recognized in the literature that Candida plays a major role⁵. These Candida-associated leukoplakic lesions were discovered to be persistent in character, with distinct elevations, huge whitish areas, and a firm to rough consistency on probing⁶. Furthermore, if the lesions are located on the commissures of the lips and the dorsal surface of the tongue, there should be room for debate on whether the lesions are caused by Candidaisis or by Candida linked leukoplakia. If the lesions resolve within four weeks after receiving antifungal therapy, there is no longer any need to label such lesions as Oral leukoplakia. Nonetheless, in the event of persistence, the diagnosis of Candida-associated leukoplakia is still valid^{7.}

Bánóczy noted that Candida albicans infection exists and plays a vital part in malignant transformation into cancer, as well as that oral leukoplakia has a higher risk of evolving into cancer (25.9 percent)⁸. When compared to homogeneous leukoplakias, non-homogeneous leukoplakias had higher candidalnitrosation potentials.⁹

Treatment:-

Topical corticosteroid :- Tacrolimus 0.1% gel and Retinoid :- Isotretinoin 0.05% gel along with antioxidants :- Capsut. AntoxidHC advised for 4 weeks. Clohex ADS mouth wash given. The patient was followed up once in 4 months to check The patient did not reveal any symptoms..[Figure-2].



Figure-2. (post treatment)

Conclusion:-

It is critical to detect Oral Leukoplakia as soon as possible. Because leukoplakia has a high risk of malignancy, examining and diagnosing the disease clinically without a biopsy must be a failure. To avoid patient morbidity and mortality, proper diagnosis and care of these lesions are critical.

References:-

1.Pindborg, J. J., Smith, C. J., Waal van der, I. and an International Collaborative Group on Oral White Lesions, Oral white lesions with special reference to precancerous and tobacco-related lesions: conclusions of an international symposium held in Uppsala, Sweden, May 18 21, 1994. Journd of Oral PathoL:v and Medicine, 1996, 25, 49-54.

2. Warnakulasuriya S, Johnson NW, Waal I.Nomenclature and classification of potentially malignant disorders of the oral mucosa. J Oral Pathol Med. 2007;36(10):575-80.

3. Swain SK, Debta P. Nonsurgical treatment of oral cavity leukoplakia. Matrix Sci Medica2020;4(4):91.

4. Hogewind, W. F. C. and Waal van der, I., Leukoplakia of the labial commissure. Brilish Journal of oral and maxillofacial surgery. ', 1988, 26, 133 - 140.

5. Warnakulasuriya S, Johnson NW, van der Waal I. Nomenclature and classification of potentially malignant disorders of the oral mucosa. J Oral Pathol Med 2007;36:575-80.

6. Scully C, el-Kabir M, Samaranayake LP. Candida and oral candidosis: A review. Crit Rev Oral Biol Med 1994;5:125-57.

7. Brouns ER, Baart JA, Bloemena E, Karagozoglu H, van der Waal I. The relevance of uniform reporting in oral leukoplakia: Definition, certainty factor and staging based on experience with 275 patients. Med Oral Patol Oral Cir Bucal 2013;18:e19-26.

8. Bánóczy J. Follow-up studies in oral leukoplakia. J MaxillofacSurg 1977;5:69-75.

9. Krogh P, Hald B, Holmstrup P. Possible mycological etiology of oral mucosal cancer: Catalytic potential of infecting Candida albicans and other yeasts in production of N-nitrosobenzylmethylamine. Carcinogenesis 1987;8:1543-8.

10. Mohiddin, Arif& Author, Corresponding. (2022). LEUKOPLAKIA IN THE ORAL CAVITY :-CASE REPORT. Indian Journal of Applied Research. 12. 1-2.

11. van der Waal I, Oral leukoplakia, the ongoing discussion on definition and terminology. Medicina oral, patologia oral y cirugiabucal. 2015 Nov 1 [PubMed PMID: 26449439].