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

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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 leukoplasias 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.³,⁴

Case Report:-

![Figure 1 (Pre treatment)](image-url)
A 32-year-old female patient with a white spot on the left posterior buccal mucosa presented to the Dental 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.

**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 role. 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 probing. 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 Candidiasis 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.

Bánoczy 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). When compared to homogeneous leukoplakias, non-homogeneous leukoplakias had higher candidal nitrosation potentials.

**Treatment:**

Topical corticosteroid: Tacrolimus 0.1% gel and Retinoid: Isotretinoin 0.05% gel along with antioxidants: Capsut. AntioxidHC 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. (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:**

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