

Oral Leukoplakia

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Background

Oral leukoplakia (OL) is a white patch or plaque that cannot be rubbed off, cannot be characterized clinically or histologically as any other condition, and is not associated with any physical or chemical causative agent except tobacco. Therefore, a process of exclusion establishes the diagnosis of the disease. In general, the term leukoplakia implies only the clinical feature of a persistent, adherent white plaque; therefore, reserve the term for idiopathic lesions when investigations fail to reveal any cause. The term carries absolutely no histologic connotation, although, inevitably, some form of disturbance of the surface epithelium is characteristic.

Follow-up studies suggest that cancer is more likely to occur in individuals with idiopathic leukoplakia than in individuals who do not have this condition. Thus, idiopathic leukoplakia is considered a premalignant lesion.^[1, 2]

Pathophysiology

The etiology of most cases of OL is unknown (idiopathic). In other cases, the initiation of the condition may depend on extrinsic local factors and/or intrinsic predisposing factors. Factors most frequently blamed for the development of idiopathic leukoplakia include tobacco use, alcohol consumption, chronic irritation, candidiasis, vitamin deficiency, endocrine disturbances, and possibly a virus.

Epidemiology

Frequency

International

OL occurs in fewer than 1% of individuals.

Mortality/Morbidity

OL is considered to be potentially malignant, with a transformation rate in various studies and locations that range from 0.6 to 20%.

A long-term follow-up study by Fan et al indicated that oral leukoplakia can increase the risk of esophageal squamous cell carcinoma (ESCC). The study, in which nearly 29,584 healthy adults were enrolled, found that 2924 persons in the study developed ESCC over a 28-year follow-up period; in adults aged 52 years or younger at baseline, the hazard ratio for the disease in those with leukoplakia was 1.31.^[3]

Sex

OL is more common in men than in women, with a male-to-female ratio of 2:1.

Age

Most cases of OL occur in persons in their fifth to seventh decade of life. Approximately 80% of patients are older than 40 years.

Clinical Presentation

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