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ORAL LEUKOPLAKIA IS OFTEN ENCOUNTERED IN DENTAL PRACTICE

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✓ ***Resume***

Oral leukoplakia (OLK) is a common mucosal pathology frequently encountered in general dental practice which belongs to a group of conditions known as oral potentially malignant disorders (OPMDs). This inferred risk of progression to oral squamous cell carcinoma warrants an understanding of the etiology of this condition, its clinical presentation, and how patients diagnosed with OLK are managed in both general and specialist care practices.

Keywords: Leukoplakia, leukoplakia prevention, leukoplakia treatment, malignancy risk.

ЛЕЙКОПЛАКИЯ ПОЛОСТИ РТА ЧАСТО ВСТРЕЧАЕТСЯ В СТОМАТОЛОГИЧЕСКОЙ ПРАКТИКЕ

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✓ ***Резюме***

Лейкоплакия полости рта (ЛПР) — распространенная патология слизистой оболочки, часто встречающаяся в общей стоматологической практике и относящаяся к группе состояний, известных как потенциально злокачественные заболевания полости рта (ЗЗПР). Этот предполагаемый риск прогрессирования плоскоклеточного рака полости рта требует понимания этиологии этого состояния, его клинической картины и того, как пациенты с диагнозом ЛПР лечатся как в общей, так и в специализированной практике.

Ключевые слова: лейкоплакия, профилактика лейкоплакии, лечение лейкоплакии, риск малигнизации.

STOMATOLOGIK AMALIYOTDA KO’P UCHRAYDIGAN OG’IZ BO’SHLIG’I LEYKOPLAKIYASI

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✓ ***Rezyume***

Og'iz bo’shlig’i leykoplakiyasi (OL)umumiy stomatologik amaliyotda tez-tez uchraydigan va og'iz bo'shlig'ining potentsial xavfli kasalliklari (OPXK) deb nomlanuvchi sharoitlar guruhiga tegishli bo'lgan shilliq qavatning keng tarqalgan patologiyasi. Og'iz bo'shlig'i submukoz hujayrali karsinomaning rivojlanish xavfi ushbu holatning etiologiyasini, uning klinik ko'rinishini va OBL tashxisi qo'yilgan bemorlarni umumiy va ixtisoslashgan amaliyotda qanday davolash kerakligini tushunishni talab qiladi.

Kalit so'zlar: leykoplakiya, leykoplakiyaning oldini olish, leykoplakiyani davolash, malignizatsiya o'sma xavfi,

Introduction

Oral leukoplakia is a common cause of such white patches. Oral leukoplakia is defined as a white patch of questionable risk having excluded all (other) potential causes that carries no increased risk of carcinoma. The term OPMD refers to any oral mucosal abnormality that is associated with a statistically increased risk of developing oral cancer.[1] Given the risk of malignant transformation associated with leukoplakia, it is imperative that general dental practitioners (GDPs) recognise oral leukoplakia and understand the appropriate management of this condition.

Aetiology

The development of oral leukoplakia appears to be multifactorial in nature. However, the definitive cause is unclear. Smoking has been identified as the predominant risk factor, with oral leukoplakia six times more common in smokers. Alcohol is recognised as an independent risk factor for oral leukoplakia. However, its aetiological role is less clear in oral leukoplakia than in OSCC. Oral leukoplakia also arises in non-smokers and non-alcohol drinkers, suggesting a potential genetic predisposition. Betel quid is a significant aetiological factor in Southeast Asia and is responsible for the increased prevalence of oral leukoplakia in this region.

Epidemiology

While reported rates of oral leukoplakia vary among different geographic regions and demographical groups, a recent systematic review and meta-analysis reported a pooled prevalence of 4.12% globally. Oral leukoplakia is more commonly seen in men and is increasingly common with age.

Clinical presentation

The sites most commonly affected include the lateral and ventral tongue, buccal mucosa, and floor of the mouth, the latter site being frequently affected in populations with a high prevalence of smoking.

Oral leukoplakia may be subclassified into homogeneous and non-homogeneous forms. Homogenous oral leukoplakia (**Figure 1**) is characterised by a predominantly flat, uniform, often well-demarcated white patch, with a consistent surface topography, and it usually lacks symptoms.

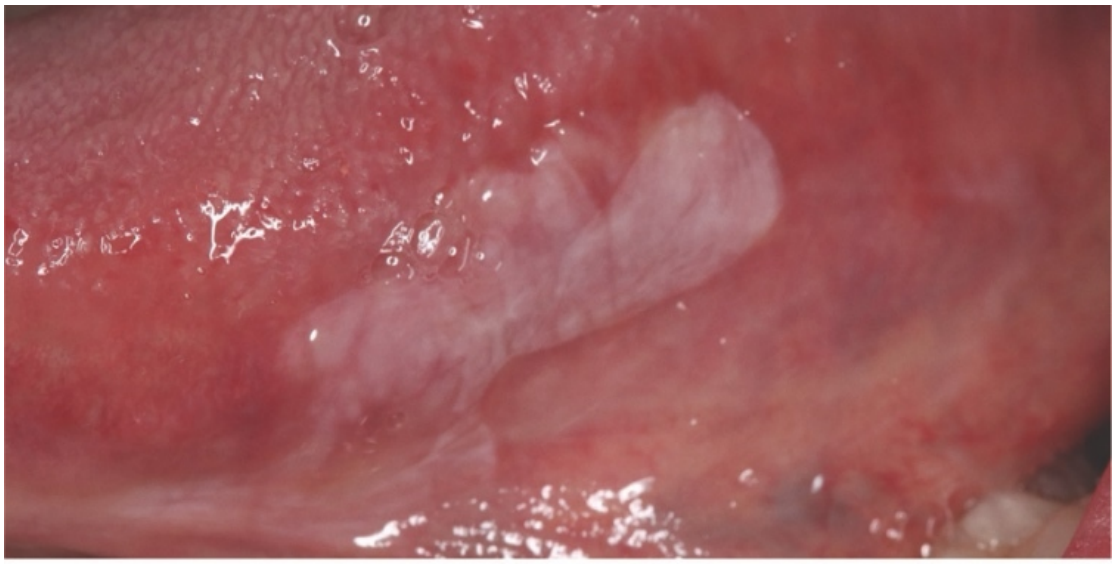

FIGURE 1: Homogenous oral leukoplakia on the lateral border of the tongue.

Non-homogenous oral leukoplakia should be regarded with significant suspicion as it carries a higher risk of malignant transformation than homogenous oral leukoplakia.[7] There are several diverse clinical presentations including erythroleukoplakia (**Figure 3**), which is defined as a mixed white and red patch, but retaining a predominantly white colour. Non-homogenous oral leukoplakia may show focal superficial ulceration and the margins can be more diffuse. Non-homogenous oral leukoplakia with red or ulcerated areas can be symptomatic.

FIGURE 3: An extensive, non-homogenous leukoplakia showing intermixed red and white areas involving the left lateral border of the tongue. This appearance is also termed erythroleukoplakia.

An up-to-date medical and social history is essential to identify risk factors for oral leukoplakia. This should include questions relating to a family history of white patches or oral cancer, genetic conditions, and immunosuppression. The medication list should be reviewed to identify if the patient is taking any drugs that can elicit lichenoid reactions. Patients should be asked about past or current smoking habits and, if current smokers, they should be asked details about previous quit attempts, including number of attempts, duration of quit periods, smoking cessation aids used, and triggers for resumption of tobacco. Similarly, alcohol consumption should be quantified, and the use of betel nut queried, as appropriate.

The clinical findings along with the history must be interpreted by the practitioner to decide the next stage of management. This will most likely involve referral to secondary care. A detailed referral letter using institutional referral proformas, if available, and including clinical photographs of the oral leukoplakia, should be sent to facilitate appropriate triage at the specialist centre. If there is an obvious source of trauma from adjacent teeth or a denture, this should be addressed first, and the area reviewed two to three weeks later. Referral to secondary care should proceed if there is no improvement in the white patch. If there is no obvious cause, then a referral should be made immediately. Of note, white patches on edentulous alveolar ridges are generally due to friction when chewing and can be monitored in general dental practice, only requiring referral if atypical in appearance. Upon receipt of a referral for an oral leukoplakia in a specialist unit, the patient will be assessed and will likely proceed to biopsy. Histological examination is important, firstly to exclude other conditions that can present as a white patch (e.g., lichen planus, chronic hyperplastic candidiasis), and secondly to determine the presence and degree of epithelial dysplasia. Usually, an incisional biopsy is carried out from the most clinically suspicious area of the patch, which will usually correlate with the most severe histological findings. If the oral leukoplakia is small, however (e.g., <5mm), an excisional biopsy may be performed.

On histopathological examination of oral leukoplakia, hyperkeratinisation is always present, which is responsible for the white appearance of the patch. However, epithelial atrophy and hyperplasia may also be evident. The pathologist will look for the presence of oral epithelial dysplasia (OED), which is a disturbance in the differentiation of the epithelium. Several classification systems have been proposed over the last two decades in an attempt to standardise the reporting of OED.

Malignant transformation of leukoplakia

Oral leukoplakia is an OPMD and, as such, a common question from patients following a diagnosis of leukoplakia is the risk of transformation into OSCC. The likelihood of malignant transformation cannot be reliably predicted and is patient specific. The pooled proportion of malignant transformation of leukoplakia is estimated at 9.8%.

Low-risk oral leukoplakias

Oral leukoplakias that demonstrate no/mild OED can often be managed conservatively. This involves addressing known risk factors for malignant transformation, i.e., alcohol and smoking. If a patient has other risk factors, however, the risk may need to be reassessed.

High-risk oral leukoplakias

Risk factors must be addressed in patients with oral leukoplakia showing moderate/severe OED, and excision is generally advocated if feasible. Several methods are available. Laser ablation and cryosurgery are not advised, however, as they have the significant disadvantage of causing tissue destruction, so there is no specimen available for histopathological examination. An important factor that must be considered when deciding if surgery is the best option is whether the morbidity likely to arise from the surgery is justified

Multifocal oral leukoplakia poses a particular challenge in this regard. A significant advantage of surgical removal of the area includes the benefit of providing the entire specimen for histological analysis, with one study identifying foci of OSCC in 7% of excised oral leukoplakias.

Conclusion

Oral leukoplakia, a common OPMD that is usually asymptomatic, is likely to be encountered in general dental practice. Its clinical importance is derived from its association with the development of OSCC, a disease with high morbidity and mortality. The main strategy in the management of oral leukoplakia is early diagnosis, the addressing of modifiable risk factors, regular surveillance, and surgical management, as dictated by the clinical situation. GDPs are the healthcare practitioners best placed to detect oral leukoplakia, given the volume of patients from various backgrounds encountered daily.

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