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Short Communication

Changing Trends of Tobacco-Related Oral Lesions in Dental Outpatients

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Abstract

Tobacco use remains a major public health concern and is a well-established etiological factor for a wide range of oral mucosal lesions. With changing patterns of tobacco consumption, including increased use of smokeless tobacco and mixed habits, the clinical presentation of tobacco-related oral lesions has evolved over time. Dental outpatients often present with these lesions incidentally during routine examinations, many of which are asymptomatic in the early stages. In addition to the physical morbidity, tobacco-related oral lesions are associated with significant psychosocial impact and an increased risk of malignant transformation. Acknowledging the changing trends and rising burden of these lesions, there is an urgent need for strengthened preventive strategies, early detection, and patient education within dental settings.

Keywords: Tobacco; Oral Diseases

Abbreviations

Tobacco use, in both smoked and smokeless forms, is one of the most significant risk factors for oral mucosal lesions and oral cancer [1]. The oral cavity is often the first site to exhibit the harmful effects of tobacco, making dental professionals uniquely positioned to identify early changes [2]. In recent years, there has been a noticeable shift in the type of tobacco products consumed, particularly among younger individuals, with increased use of smokeless tobacco, areca nut containing products, and combined habits [3]. These changes have influenced the clinical patterns of tobacco-related oral lesions seen in dental outpatient departments. The objectives of this article are to highlight the changing trends of tobacco-related oral lesions, discuss their implications, and emphasize the role of dental professionals in prevention and early intervention.

Tobacco-related oral lesions: Changing trends

Traditionally, smoking-related lesions such as smoker's palate, nicotine stomatitis, and smoker's melanosis were more commonly encountered [4]. However, current clinical observations indicate a rising prevalence of lesions associated with smokeless tobacco use, including oral leukoplakia, oral submucous fibrosis, tobacco pouch keratosis, and erythroleukoplakia [3,5]. Cigarette smoking and smokeless tobacco use are associated with immediate and long-term adverse health effects, including nicotine addiction, oral and systemic disease, and death.

These lesions are frequently observed in sites where tobacco products are habitually placed, such as the buccal mucosa, labial mucosa, vestibule, and commissural areas [5]. Another concern-

ing trend is the appearance of potentially malignant disorders in younger age groups, often with a shorter duration of habit history, suggesting increased exposure to commercially prepared tobacco products with higher carcinogenic potential [6].

Impact of tobacco-related oral lesions

Tobacco-related oral lesions have implications beyond physical morbidity. The presence of visible oral lesions can lead to anxiety, fear of cancer, and reduced quality of life among affected individuals [7]. Functional limitations such as burning sensation, restricted mouth opening, and difficulty in mastication and speech are commonly reported, particularly in conditions like oral submucous fibrosis [5,7].

Social stigma associated with visible oral changes and tobacco habits may further discourage individuals from seeking timely care, leading to delayed diagnosis and increased risk of malignant transformation [6,8].

Role of dental settings in prevention and early detection

Dental outpatient departments serve as critical points for early identification of tobacco-related oral lesions. Routine oral mucosal examination, even during visits for unrelated dental complaints, allows for early detection of asymptomatic lesions [2,9]. Opportunistic screening, combined with brief tobacco cessation counseling, has been shown to improve patient awareness and motivation to quit harmful habits [9].

Dental professionals also play a vital role in educating patients about the potential risks associated with different forms of tobacco, correcting misconceptions regarding "safer" alternatives, and emphasizing the importance of regular follow-up for suspicious lesions [8,9].

Identified challenges and potential solutions

One of the major challenges is the widespread misconception that smokeless tobacco products are less harmful than smoking [3,6]. Targeted health education campaigns using culturally appropriate language are essential to counter these beliefs. Another challenge is poor patient compliance with habit cessation advice, often due to addiction and lack of social support [8]. Integrating behavioral counseling, referral to cessation programs, and follow-up within dental care can improve outcomes [9].

Limited awareness among patients regarding early signs of oral potentially malignant disorders also contributes to delayed presentation. Strengthening training of dental professionals in oral medicine and encouraging systematic oral screening protocols can help overcome this gap [2,9].

Conclusion

Changing patterns of tobacco consumption have led to evolving trends in tobacco-related oral lesions among dental outpatients. The increasing prevalence of potentially malignant disorders, particularly among younger individuals and smokeless tobacco users, is a growing concern. A comprehensive approach involving routine oral screening, patient education, tobacco cessation counseling, and public health interventions is essential to reduce the burden of tobacco-related oral diseases.

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