Opinion
Volume 9:3, 2023

Oral Health Case Reports

ISSN: 2471-8726 Open Access

Oral Precancerous Lesions: Identification, Risk Assessment and Management

Richard Jordan*

Department of Orofacial Sciences, University of California, San Francisco, California, USA

Introduction

Oral precancerous lesions are potentially malignant conditions that, if left untreated, can progress to oral cancer. Early identification, risk assessment, and appropriate management of these lesions are crucial for preventing the development of invasive oral cancer. This article provides an overview of oral precancerous lesions, highlighting the importance of their identification, the assessment of associated risk factors, and the management strategies available for mitigating the progression to malignancy. Oral precancerous lesions are abnormal tissue changes in the oral cavity that have the potential to develop into oral cancer if left untreated. These lesions serve as important warning signs and require close monitoring and appropriate management to prevent the progression to malignancy. Understanding oral precancerous lesions is crucial for early detection, intervention, and improved patient outcomes. This article provides an overview of oral precancerous lesions, including their types, causes, risk factors, and the importance of their identification and management [1].

Description

Oral precancerous lesions are abnormal tissue changes in the oral cavity that have the potential to progress to oral cancer if left untreated. These lesions serve as important warning signs, providing an opportunity for early detection, intervention, and prevention of malignant transformation. Understanding oral precancerous lesions and their significance is crucial for dental professionals and healthcare providers to effectively identify, manage, and monitor individuals at risk. This introduction provides an overview of oral precancerous lesions, emphasizing their importance, risk factors, and the need for timely intervention to prevent the development of oral cancer [2].

The oral cavity is susceptible to various types of precancerous lesions that indicate cellular changes and increased risk for malignant transformation. The most common types of oral precancerous lesions include leukoplakia, erythroplakia, Oral Submucous Fibrosis (OSF), actinic cheilitis, and Proliferative Verrucous Leukoplakia (PVL). These lesions can present as white or gray patches (leukoplakia), red velvety patches (erythroplakia), or fibrotic changes in the oral mucosa (OSF). Actinic cheilitis primarily affects the lower lip and is associated with chronic sun exposure, while PVL is a rare and aggressive form of leukoplakia [3].

Various risk factors contribute to the development of oral precancerous lesions. Tobacco use, whether through smoking, chewing, or using smokeless tobacco products, significantly increases the risk. Excessive and prolonged alcohol consumption, betel quid chewing (a mixture of areca nut, tobacco, and other ingredients), human papillomavirus (HPV) infection, and poor oral hygiene practices are also associated with an increased risk of developing these lesions. Early identification and diagnosis of oral precancerous lesions are crucial for effective intervention. Dental professionals play a vital role in identifying suspicious lesions through visual examinations, palpation, and, when necessary, performing biopsies or brush biopsies. Histopathological analysis of the tissue samples obtained from biopsies helps establish a definitive diagnosis and determine the severity of the lesion [4].

The management of oral precancerous lesions aims to prevent their progression to oral cancer. Treatment options may include monitoring and observation for low-risk lesions, removal of risk factors, surgical intervention, topical medications, laser therapy, or photodynamic therapy, depending on the type and severity of the lesion. Long-term follow-up and monitoring are essential after treatment or observation to detect any recurrence or the development of new lesions. Regular dental check-ups, oral examinations, and screenings are necessary to ensure early detection and appropriate intervention if required [5].

Types of oral precancerous lesions

There are several types of oral precancerous lesions that require careful evaluation and management:

Leukoplakia: Leukoplakia presents as white or gray patches on the oral mucosa, which cannot be scraped off and is not attributable to any other known cause. It is the most common precancerous lesion.

Erythroplakia: Erythroplakia appears as a red, velvety patch that is often associated with a higher risk of malignant transformation compared to leukoplakia.

Oral Submucous Fibrosis (OSF): OSF is a chronic, progressive condition characterized by fibrotic changes in the oral mucosa, leading to restricted mouth opening, burning sensation, and potentially malignant changes.

Actinic cheilitis: Actinic cheilitis affects the lower lip, resulting from chronic sun exposure. It is characterized by dryness, scaling, and the potential for malignant transformation.

Proliferative Verrucous Leukoplakia (PVL): PVL is a rare form of leukoplakia that typically resists treatment and has a high potential for malignant transformation.

Identification of oral precancerous lesions

Early identification and proper diagnosis of oral precancerous lesions are crucial. Dental professionals should be vigilant in performing thorough oral examinations and screenings for high-risk individuals. Key points to consider include:

Visual inspection: Dentists and oral healthcare providers should carefully examine the oral cavity, looking for any suspicious lesions, patches, or areas of abnormal tissue.

Tactile examination: Palpation can help determine the texture, consistency, and depth of the lesion, providing additional information for diagnosis and management.

Biopsy and histopathological examination: When encountering a suspected oral precancerous lesion, a biopsy is often necessary to establish a definitive diagnosis. Histopathological examination by a skilled pathologist is essential for accurate identification and grading of the lesion.

***Address for Correspondence:** Richard Jordan, Department of Orofacial Sciences, University of California, San Francisco, California, USA, E-mail: richard.jordan579@ucsf.edu*

Received: 02 May, 2023, Manuscript No. OHCR-23-105782; **Editor Assigned:** 04 May, 2023, PreQC No. P-105782; **Reviewed:** 16 May, 2023, QC No. Q-105782; **Revised:** 22 May, 2023, Manuscript No. R-105782; **Published:** 29 May, 2023, DOI: 10.37421/2471-8726.2023.9.85

Management of oral precancerous lesions

The management of oral precancerous lesions involves a multidisciplinary approach, focusing on the elimination of risk factors, close monitoring, and appropriate intervention. Strategies for management include:

Patient education: Providing patients with information about the nature of oral precancerous lesions, associated risk factors, and the importance of regular follow-up visits is essential. Patients should be educated about lifestyle modifications, including tobacco cessation, alcohol moderation, and maintaining good oral hygiene practices.

Risk factor reduction: Encouraging patients to eliminate or minimize the use of risk factors, such as tobacco, alcohol, and betel quid, is crucial in reducing the progression of precancerous lesions.

Surgical intervention: Surgical removal of the lesion, known as excisional biopsy or surgical ablation, may be necessary for certain high-risk lesions, depending on their size, location, and histopathological features.

Chemoprevention: In some cases, the use of medications, such as retinoids or nonsteroidal anti-inflammatory drugs (NSAIDs), may be considered to help reduce the risk of malignant transformation in selected cases.

Regular Follow-up and Surveillance: Patients with oral precancerous lesions should be closely monitored with regular follow-up visits, including thorough clinical examinations and biopsies as necessary.

Conclusion

Early identification, risk assessment, and appropriate management of oral precancerous lesions are vital for preventing the progression to invasive oral cancer. Dental professionals play a crucial role in recognizing and diagnosing these lesions, and they should conduct thorough oral examinations and implement appropriate management strategies. By identifying high-risk individuals, educating patients about risk reduction, and implementing timely interventions, healthcare providers can significantly reduce the morbidity and mortality associated with oral precancerous lesions. Regular follow-up and surveillance are essential to ensure early detection of malignant transformation and provide the best possible outcomes for patients.

References

1. Maybury, Catherine, Alice M. Horowitz, Sylvette La Touche-Howard and Wendy Child, et al. "Oral health literacy and dental care among low-income pregnant women." *Amer Health Behavior* 43 (2019): 556-568.
2. Holtzman, Jennifer S., Kathryn A. Atchison, Mark D. Macek and Daniela Markovic. "Oral health literacy and measures of periodontal disease." *J Periodontol* 88 (2017): 78-88.
3. Shivakumar, K. M., Sumanth Prasad and G. N. Chandu. "International caries detection and assessment system: A new paradigm in detection of dental caries." *J Conserv Dent* 12 (2009): 10.
4. Little, W. A., D. C. Korts, L. A. Thomson and W. H. Bowen. "Comparative recovery of *S. mutans* on ten isolation media." *J Clin Microbiol* 5 (1977): 578-583.
5. Zeng, Yan, Moustafa Youssef, Lin Wang and Naemah Alkhars, et al. "Identification of non-streptococcus mutans bacteria from predente infant saliva grown on mitis-salivarius-bacitracin agar." *J Clin Pediatr Dent* 44 (2020): 28-34.

How to cite this article: Jordan, Richard. "Oral Precancerous Lesions: Identification, Risk Assessment and Management." *Oral Health Case Rep* 9 (2023): 85.