

Non Homogenous Leukoplakia and Stomatitis Nicotina in a Chronic Smoker Male Patient: A Case Report

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ABSTRACT

Tobacco intake in any form, either in smoking form or smokeless form, is hazardous to oral health. The greatest reward of tobacco intake is oral cancer. There are several oral lesions that occur due to tobacco intake; some are autoimmune, some are related to systemic diseases in the body, some are idiopathic (without any cause), some are traumatic, and some are genetic. A clinical dilemma of oral lesions stems from an ill-defined, poorly understood appearance that manifests in the oral cavity leading to misdiagnosis and improper treatment. The treatment of any oral lesion lies on proper case history, clinical examination, inspection and palpation, correct diagnosis and a systemic treatment planning.

Keywords: Leukoplakia, Malignant, Smoker's Palate.

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Introduction

Oral lesions can be classified into four groups comprising ulcerations, pigmentations, exophytic lesions, and red-white lesions.¹ White and red patches of the oral mucosa constitute an important group of disorders arising from a diverse spectrum of conditions ranging from traumatic lesions, infectious diseases, systemic and local immune-mediated lesions, to potentially malignant disorders or a neoplasm.²

This article presents a case report of two lesions that were diagnosed in a chronic tobacco-smoking patient in the department of oral medicine in our college, during an intra-oral examination.

Case Report

A patient reported to the department of oral medicine and radiology with a chief complaint of severe burning sensation in the mouth for three months. The patient was normal in physical appearance, had a normal gait and had no history of any systemic disease. The patient gave a

history of tobacco smoking for 20 years. Also, he used to take smokeless tobacco for 15 years.

During further inspection of the oral cavity, a white curd-like lesion was seen on the right buccal mucosa, near the commissure area of the lip. The whitish patch was uniform in nature with an erythematous central halo. The lesion was approximately 2x3 cm in diameter. On palpation, the patch was tender in nature. Furthermore, the lesion did not scrape off with a cotton gauge or any other instrument. As previously stated, the patient had a severe burning sensation and tenderness in the same region. Based on the clinical findings, the lesion was diagnosed as 'Non-homogeneous leukoplakia'.

Furthermore, on examination of the hard palate, dark bluish black discoloration was seen in its mucosa. The lesion was asymptomatic and non-tender in nature. Based on clinical findings, the diagnosis of the lesion on the buccal mucosa was made as 'Non-homogeneous leukoplakia', and the

lesion on the hard palate was made as 'Smoker's palate'.



A curd-like white lesion was seen on the right buccal mucosa near the commissure area of the lip, surrounded by an erythematous halo.



A bluish black discoloration was seen on hard palate.

Considering the low economic status of the patient, the treatment relied on chemotherapy rather than surgical treatment. For treatment of non-homogeneous leukoplakia, an ointment of tretinoin acid 0.05% and vitamin A (Combination) was given for two weeks for

topical application. Multivitamin supplements were given for further healing.

As non-homogenous leukoplakia has a tendency for candidiasis infection, an ointment of clotrimazole 1% was given to be applied topically.

Patient was also given antioxidant and vitamin B complex supplements twice a day, for two weeks, for the healing of the lesions. The patient was advised to cease intake of tobacco in any form, smoking or smokeless, as it might lead to further progression of the lesion to malignant form.

The patient was kept on follow-up for further monitoring and good prognosis.

Discussion

Leukoplakia is the term used for a white lesion that is precancerous and is defined by the World Health Organization (WHO) as “a white plaque of questionable risk having excluded (other) known diseases or disorders that carry no increased risk for cancer. Axel et al. defined leukoplakia as, ‘A whitish patch or plaque characterized clinically or pathologically as any other disease and is not associated with any other disease, and is not associated with any physical or chemical agent, except for the use of tobacco.’³ It clinically occurs in four clinical forms, pre-leukoplakia, homogenous leukoplakia, verruciform leukoplakia and speckled leukoplakia.⁴

Differential diagnosis for this lesion is leukoedema, frictional keratosis, oral candidiasis and lichenoid reaction. The leukoplakia can transform to malignant squamous cell carcinoma if left untreated and if the patient doesn’t cease tobacco intake. Furthermore, proliferative verrucous leukoplakia is an aggressive lesion and is called as precursor of squamous cell carcinoma and is termed a malignant disorder by the World Health Organisation.⁵

White lesions occur in the oral cavity with a prevalence of 24.8%, while oral leukoplakia has prevalence of 0.2 to 3.6%.⁶

Currently, oral leukoplakia is treated by surgical removal, radiation therapy, laser surgery, photodynamic therapy and by chemotherapy.⁷

Smoker’s palate, also known as stomatitis nicotina, is found in older individuals who are chronic smokers or have been taking tobacco

since long time. It appears as white or bluish black spots on hard palate, sometimes covering whole palate. No treatment is required for this lesion as cessation of tobacco causes its remission.

This article highlights a case of homogenous leukoplakia that was clinically examined, diagnosed and treated with medication in our department. The patient was kept on follow-up for a good prognosis.

Conclusion

The main aim of the article was not only present a case report but also to throw a light on the hazards of the intake of tobacco, which causes oral cancer and, if not stopped in time, can lead to death. As the mouth is the main part of the human body, its proper maintenance of health is essential, as is the rest of the body.

References

1. Jessri M, Mawardi H, Farah C, Woo S, Farah C, Balasubramaniam R, et al. White and Red Lesions of the Oral Mucosa. Contemporary Oral Medicine. 2019.
2. Poonam, Rajendra et al: Journal of oral pathology and oncology; <https://ijpo.co.in/archive/volume/10/issue/3/article/18307>
3. Warnakulasuriya, S., Johnson, N. W., & Der Waal, I. V. (2007). Nomenclature and classification of potentially malignant disorders of the oral mucosa. Journal of Oral Pathology & Medicine, 36(10), 575-580. <https://doi.org/10.1111/j.1600-0714.2007.00582.x>
4. Peeyush Shivhare, textbook of oral medicine and radiology; chapter 6 Potentially Malignant disorders; page no.202.
5. Peeyush Shivhare, textbook of oral medicine and radiology; chapter 6 Potentially Malignant disorders; page no.204.
6. Mervit Moussa et.al. Oral proliferative verrucous leukoplakia: The unsolved paradox – A case report; Madridge

Journal of Dentistry and Oral Surgery;
2017. <https://doi.org/10.18689/mjdl-1000114>

7. Bouquot JE; Gorlin RJ et.al; Leukoplakia; lichen planus and other keratosis in white

Americans, over the age of 35 years; Oral
Medicine; Oral Surgery; Oral Pathology;
1986; Page no. 373 – 381. doi:
[https://doi.org/10.1016/0030-4220\(86\)90422-6](https://doi.org/10.1016/0030-4220(86)90422-6)

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