

Leukoplakia: A CASE REPORT

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Abstract:

Oral leukoplakia is a potentially malignant disorder of the oral cavity. Risk of malignant transformation is directly proportional to the age. Diagnosis can be challenging as any other similar conditions, need to be mandatorily ruled out. The case below has been documented in with Guidance from Prof. Dr. Sandeep Pagare and Dr. Mandavi Waghmare Prof. & HOD Department of Oral Medicine and Radiology of D. Y. Patil School of Dentistry Nerul Navi Mumbai.

Key words: Leukoplakia, Keratosis, Pre – Malignant lesion, White lesion.

Introduction:

The word leukoplakia means "white patch", and is derived from the Greek words λευκός (leuko)- "white" and πλάξ (plakia)- "plaque". The word was first coined by a hungarian dermatologist, Schwimmer in 1877. WHO in 1978 recognized it as a white patch or plaque that cannot be characterized either clinically or pathologically as any other disease or condition. ^(1,2,4) Although

commonly seen in the oral cavity it can present itself in other parts of the GI tract, urinary tract, genitals and anal canal.

Case Report:

C/o White patch on the inner surface of the lower lip and burning sensation of mouth while having food.



The lesion began as a small white patch over the lower labial vestibule and gradually increased to its present size, over a period of 18 months. Denies any specific aggravating and /or precipitating factors or any obvious physical/ mental stress. However, reports the use of topical medicaments (Tess gel – TDS and Candid Mouth Paint – TDS, on prescription by a dermatologist in the past with limited benefits. Was examined a year ago and denies any medical/ surgical history or any history of known allergies.

Has a history of using tobacco with slake lime in form of a quid that is placed in the labial vestibule of the lower jaw for the past 20 years with a frequency of (use) upto 15 times a day. However, claims to have stopped since the past 8 months.



On extra oral examination, the face is symmetrical with normal competent lips and the eyes, ears and nose appear normal. The lymph-nodes are non- palpable while the TMJ opens and closes in a straight line with a smooth range of motion.

Intra-orally, a white, non- scrapable, raised plaque like lesion extending from the vermilion border of the lip to the vestibule and over the attached gingiva has been noted. Teeth involved are 33 to 43. The patch also extends over the buccal mucosa (mandibular muco-buccal fold) on the right side from tooth number 44 to 48, approximately 6 to 7 cms in size and of leathery consistency. The hard and the soft palate appear normal and there is no history of any similar regions on the hard or the soft palate.

Pigmentation seen on the dorsal surface of the tongue, is suggestive of tobacco induced melanosis.

Provisional Diagnosis: Leukoplakia based on the clinical findings (raised plaque link white patch, non tender and non scrapable).

Investigations ordered: Biopsy.

Tissue obtained for the biopsy included normal as well as affected tissue from the oral (buccal & labial vestibule) mucosa. Biopsy revealed, parakeratinized stratified squamous epithelium with moderate dysplastic features (like hyperchromatism, abnormal mitosis, nuclear pleomorphism and

acanthosis) and connective tissue entrapment. Connective tissue stroma shows dense inflammatory cell infiltrates.

Differential Diagnosis: Frictional keratosis (Considering the patients age and the severe attrition of teeth), Oral Candidiasis (ruled out as no *Candida Albicans* seen on PSA staining.)

Diagnosis: Homogenous leukoplakia on the right side buccal mucosa, vestibule and lower labial mucosa and vestibule of STAGE IV. Histologic findings consistent with diagnosis.

Treatment: Ablation done using a diode laser of 7 W in the pulse mode.



Healing post ablation: Over a period of 7 to 10 days

The patient was observed for 20 days for any recurrence. The patient was on vit A chewable BD during this time. There was no recurrence over the labial vestibule or mucosa post ablation.

Post this the right buccal mucosa was ablated

The procedure was uneventful and there was complete healing observed.

The patient was put on a maintenance dose of chewable tablets of Vit A for 15 days BD

There was complete healing of the lesions with the burning sensation.

The patient was under follow up for almost two years and there was no recurrence of lesions.



Discussion:

The homogeneous leukoplakia is a uniform, thin white area altering or not with normal mucosa. Usually seen as a well defined slightly elevated white patch of uniform appearance and texture, although there may be superficial irregularities, generally consistent throughout the whole lesion. On palpation, it may feel leathery, dry, or like cracked mud.

Laser Ablation: Laser -assisted ablation is a more precise treatment with less postop discomfort for leukoplakia; our study is in accordance with this study. Pulsed mode is more comfortable than continuous wave mode which was similar to a study done by Rolf Brochers⁽⁶⁾, and hence pulsed mode was used in our study. According to a case report by Tatu et al⁽⁷⁾, diode laser was performed for leukoplakic ablation at 7 W which establishes its efficacy in management of oral leukoplakia, we followed the same method in this study which showed profound acceptance by patients in comparison to scalpel.

Conclusion:

There was no recurrence of lesion. Ultimate control of leukoplakia is more important to reduce the risk. Hence, Laser Ablation is a definitive technique with marked clinical improvement with high degree of patient acceptance in comparison to scalpel excision.

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