



## LEUKOPLAKIA IN THE ORAL CAVITY :- CASE REPORT

Dr. Arif Mohiddin\*

M.D.S In Oral Pathology, Clinical Tutor, Department of Dentistry, IPGME&amp;R, Kolkata, West Bengal. \*Corresponding Author

**ABSTRACT**

leukoplakia is a rare potentially malignant lesion, usually found on the oral mucosa with an increased risk of malignant transformation as compared to the tobacco associated form. The risk of malignant transformation increases with age. Diagnosis poses a challenge to the clinician as it is diagnosed by exclusion of other possible causes leading to hyperkeratosis. We present one such rare case in an elderly male patient who was followed up for a six months to record the course of the lesion.

**KEYWORDS :** leukoplakia, Keratosis, Potentially malignant.**INTRODUCTION**

Leukoplakia is a greek word- Leucos means white and Plakia-means patch. It was first coined in the second half of the 19th century by the Hungarian dermatologist, Schwimmer in 1877.<sup>1,2,4</sup> WHO (1978)- A white patch or plaque that cannot be characterized clinically or pathologically as any other disease.

**Classification:-**WARNAKULASURIYA et al (2007)<sup>3,4</sup>

Homogeneous leukoplakia  
Non - Homogenous leukoplakia  
Speckled leukoplakia  
Nodular leukoplakia  
Verrucous leukoplakia

**Staging System<sup>3,4</sup>**

A clinical staging system for oral leukoplakia (OL system) on the lines of TNM staging was recommended by WHO in 2005 taking into account the size (L) and the histopathological features (P) of the lesion.

(L - Size of leukoplakia)

L1 - Size of leukoplakia is &lt; 2cm

L2 - Size of leukoplakia is 2 - 4 cm

L3 - Size of leukoplakia is &gt; 4cm

Lx - Size of leukoplakia is not specified

I. (P - Pathology)

Px - Dysplasia not specified in pathology report

P0 - No epithelial dysplasia

P1 - Mild to moderate epithelial dysplasia

P2 - Severe epithelial dysplasia

OLEP Staging System

Stage I L1P0

Stage II L2P0

Stage III L3P0 or L1/L2P1

Stage IV L3P1 or any LP2.

**General Rules of the OLEP Staging System**

If there is doubt concerning the correct L or P category to which a particular case should be allotted, than the lower (i.e. less advanced) category should be chosen. This will also be reflected in the stage grouping. In case of multiple biopsies of single leukoplakia or biopsies taken from multiple leukoplakias the highest pathological score of the various biopsies should be used. Leukoplakia is purely a clinical terminology and histopathologically it is reported as epithelial dysplasia. WHO in 2005 proposed five grades of epithelial dysplasia based on architectural disturbances and cytological atypia.

- Squamous Hyperplasia - benign lesion.
- Mild Dysplasia - better prognosis.
- Moderate Dysplasia.
- Severe Dysplasia.
- Carcinoma In-situ - poor prognosis.

**Case Report:-**

A 53-year-old male patient reported to the outpatient department, with a complaint of white patch on the right anterior buccal mucosa. Oral examination revealed a homogenous greyish white plaque on the right anterior buccal mucosa measuring 3.5cm x 2.5 cm [Fig-1]. The surface

showed cracked mud appearance and on palpation the lesion felt as raised and rough. The lesion was non tender and non scrapable. The patient was had tobacco habit. A provisional diagnosis of leukoplakia was considered.

**Investigations**

Incisional biopsy was planned and it included normal and affected mucosa from the site.

**Differential diagnosis**

Considering the patient's age, frictional keratosis was included. Teeth wear in the elderly can cause frictional keratosis on the anterior buccal mucosa also involving corner of mouth. patient had no sharp margins or edges ruling out the diagnosis of traumatic or frictional keratosis. Oral hyperplastic candidiasis was the next differential diagnosis that was considered, which is also commonly seen in the elderly owing to the various medications they consume and diabetes mellitus that commonly causes xerostomia. This patient was neither diabetic nor was under any medication. The mucosa appeared normal and was well hydrated ruling out candidiasis.

**Incisional biopsy**

revealed histological features shows hyperplastic stratified squamous epithelium with intraepithelial inflammatory cell infiltration consistent with leukoplakia [Fig-2]. Diagnosis of leukoplakia was derived based on the history and clinical examination.

**Treatment**

Complete excision of the lesion was performed and the histological report was again consistent with leukoplakia.

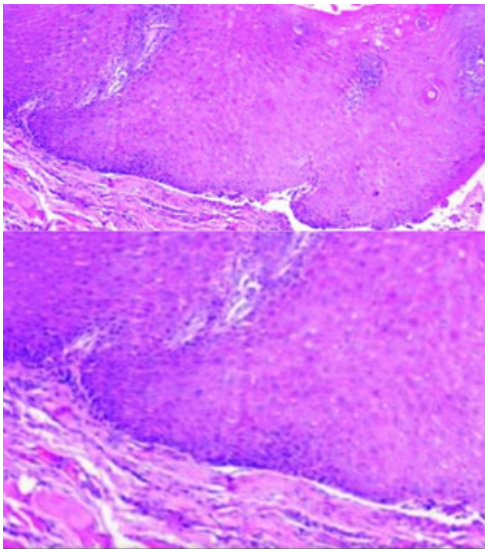
**Follow-up**

The patient was followed up once in five months to check recurrence. The patient did not reveal any signs of recurrence even after one year.[Fig-3].

**Figure:-1**

**Leukoplakia on anterior right buccal mucosa with corner of the mouth.**

**Figure:- 2**



**Hyperplastic stratified squamous epithelium with intraepithelial inflammatory cell infiltration and pearl formation also seen.**

**Figure:- 3**



**No recurrence after follow up.**

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