CLINICAL DILEMMA LEUKOPLAKIA OR ORAL LICHEN PLANUS ??

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Introduction:

Leukoplakia is strictly a clinical term indicating a white patch or plaque on the oral mucosa that cannot be rubbed off and cannot be characterized clinically as any other disease. This excludes lesions like lichen planus, candidiasis, leukoedma and frictional keratosis. Most cases of leukoplakia are etiologically related to the use of tobacco in smoked or smokeless forms and may regress after discontinuation of tobacco use.[1] Oral Lichen Planus (OLP) is a common mucocutaneous disease thought to be affecting 0.5-1 % of the worlds population.[2] The exact cause of OLP is unknown and it is generally considered to be an immunologically mediated process that microscopically resembles a hypersensitivity reaction.[3]

Through this article we wish to discuss a case which based on the clinical examination and the history provided by the patient, was diagnosed as leukoplakia. But which after the histopathological examination was confirmed to be a case of OLP. As both of these lesions are commonly seen and both have different treatment plans and prognosis it is important to distinguish both form each other.

Case Report

A 40yr old, male vegetable vendor reported to the general surgery OPD complaining of white patches bilaterally on the buccal mucosa. He had no symptomatic complaints. On clinical examination white patches measuring 4x3 cm in size were observed bilaterally. The patient gave a history of tobacco habit, both of smoking bidi and gutka chewing since the past 25yrs. A provisional diagnosis of leukoplakia was given by the operating general surgeon. A biopsy specimen was taken from the right buccal mucosa and sent for routine processing. The histopathological examination revealed a typical picture of Oral Lichen Planus (OLP), showing focal areas of epithelial hyperplasia with hyperkeratosis, acanthosis and saw toothed rete pegs. The underlying connective tissue contained a narrow, dense accumulation of lymphocytes. A band of eosinophilic coagulum was seen in place of the basal cells.

Discussion:

Leukoplakias may have similar clinical appearance but have considerable degree of microscopic heterogeneity. Because leukoplakias may range microscopically from benign hyperkeratosis to invasive squamous cell carcinomas, a biopsy is mandatory to establish a definitive diagnosis. In the absence of dysplastic or atypical epithelial changes, periodic examinations and biopsy of new suspicious areas is recommended. Potential etiological factors should be considered, removed and adverse oral habits stopped. Regular follow up is mandatory to rule out any malignant change or recurrence even after total removal.[1]

Oral Lichen Planus (OLP) is a common mucocutaneous disease first diagnosed by Wilson in 1869, affecting 0.5 1 % of the worlds population. This may involve skin, mucosa or even both together. It can occur bilaterally and is seen as white striae i.e. lines, papules or plaques on the buccal mucosa, tongue and gingiva. Red or erythematous areas may also be noticed.[2] The importance of this disease relates to its degree of frequency of occurrence, its occasional similarity to other mucosal diseases, and its occasional painful nature.[3] OLP generally is, never cured completely. Some drugs can help though in controlling the lesions. Corticosteroids are the most common and helpful among all the medication available. Local injections of steroids are successful in controlling this disease. Topical Vitamin A analogs i.e. retinoids, because of their antikeratinizing and immunomodulating effects are used in the management of OLP.[4] Patients should be monitored periodically, particularly those with the erosive or atrophic forms and those who also have a history of alcohol and tobacco misuse, because of the risk of malignant transformation.

The **malignant potential** of leukoplakia is reported to be approximately 5.4 % of all leukoplakic cases i.e. 5.4 % of leukoplakic lesions will transform to Oral Squamous Cell Carcinoma. If the patient is a tobacco user then this incidence can escalate to as high as 16%.[4] Whereas, the malignant change of OLP to squamous cell carcinoma is rare and is documented to occur in 0.4-2.5 % of OLP

patients when the lesion persists for 5 or more years. Some experienced clinicians believe that mucosa subjected to prolonged OLP becomes more susceptible to a secondary initiating carcinogen than the neighboring non involved areas. Also a slightly higher transformation rate is seen in cases of erosive lichen planus.[3,6]

Conclusion

From the case discussed above it can be concluded that it is important to differentiate oral lesions which resemble each other clinically because though these have comparable clinical appearance they may have an entirely different prognosis and treatment following the final histopathological diagnosis. This in turn emphasizes the importance of histopathology in diagnosis and treatment planning of a pathological condition.

References:

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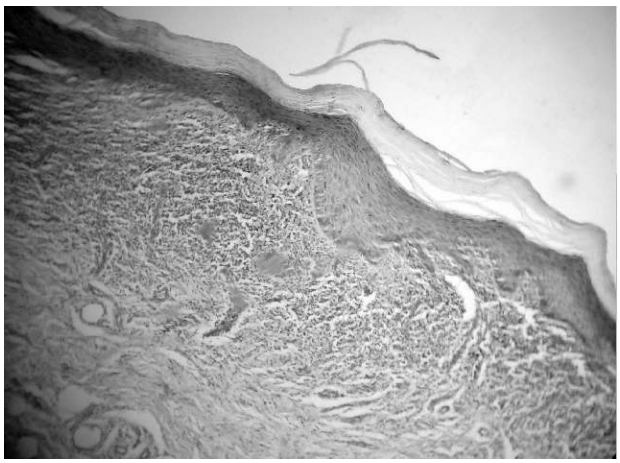
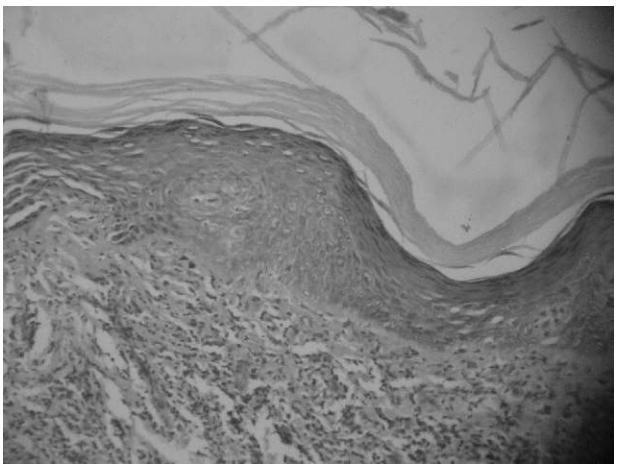
Clinical photograph: Showing left buccal mucosa of the patient. White plaque like surface seen.



Photomicrograph 1
Lichen Planus with saw tooth rete ridges and subepithelial lymphocytic infiltrate (X10).



Photomicrograph 2
Lichen Planus with eosinophilic coagulum in basal region (X10).