

ORAL SPECKLED LEUKOPLAKIA — REPORT OF TWO CASES

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SUMMARY

Two cases of oral speckled leukoplakia with differing behaviour are presented. This precancerous lesion of unknown aetiology requires early diagnosis for proper management. Candida albicans are frequently found in these lesions. The significance of epithelial dysplasia in relation to treatment is discussed. Surgical removal is the treatment of choice.

INTRODUCTION

The word "leukoplakia" literally means a white patch. Over the years, there has been a lot of confusion regarding the usage of this term, as there are numerous specific oral white lesions that must have been referred to as leukoplakia. WHO Collaborative Reference Centre for Oral Precancerous Lesion¹ defined leukoplakia as "A white patch, after clinical and laboratory investigations, cannot be placed into any known category". According to this definition, a lesion should only be termed leukoplakia if it appears white in colour and cannot be recognised as

belonging to any known entities like lichen planus, candidiasis, stomatitis nicotina and the rest. It is therefore, a diagnosis by exclusion. Whilst a more improved and complete definition is found for leukoplakia, the one suggested above should prove very satisfactory.

Although one type of leukoplakia (speckled leukoplakia) carries a higher risk of developing into malignancy than the other (homogenous leukoplakia), the clinician must be equally aware of these lesions. Pindborg *et al*² showed that 64 percent of oral carcinomas in his study arose from speckled leukoplakia. Banoczy³ showed that 26 percent of carcinomas developed in speckled leukoplakia, whilst only 2 percent carcinomas developed from the other type of leukoplakia.

It is well-known that epithelial dysplasia is a common feature of speckled leukoplakia. Studies by Banoczy and Csiba,⁴ Pindborg *et al*⁵ Kramer *et al*⁶ and Kramer⁷ were aimed at determining the importance of dysplastic epithelial features in leukoplakia in the future development of malignancy. The latter regarded derangement in cellular polarity, abnormal mitoses, nuclear hyperchromatism, cellular pleomorphism with enlarged nucleoli and individual cell keratinisation as being important features for future malignant transformations of existing benign lesions.

The aim of this paper is to present two cases of oral speckled leukoplakia with totally different behaviours, and to discuss the important features that should influence management.

CASE REPORTS

Case One

A forty-five year old Indian woman presented to the Dental Faculty, University of Malaya

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Fig. 1 Speckled leukoplakia on the right buccal mucosa. No sign of malignancy.

complaining of tooth ache. On examination, there was a painless lesion of raised keratotic masses distributed amongst a red area on the buccal mucosa opposite the mandibular second molar (Fig. 1).

A clinical diagnosis of speckled leukoplakia was made and confirmed by histopathology. A moderate degree of epithelial dysplasia was evident, together with candidal hyphae within the epithelial layer. The lesion was surgically removed and left to granulate under a whitehead's Varnish ribbon gauze. The patient is well and healthy with no sign of recurrence one year later.

Case Two

A 55-year old Indian woman came to the Dental Division, General Hospital, Kuala Lumpur, complaining of intermittent soreness for the past three months on her left cheek associated with a white patch. She noticed the lesion several years earlier but did nothing about it until it became symptomatic. The lesion comprised an indurated, white area interspersed in an area of reddened buccal mucosa. The periphery were markedly more erythematous than the surrounding tissue (Fig. 2). A clinical diagnosis of speckled leukoplakia was made. Histopathological examination revealed squamous cell carcinoma. A smear of the lesion showed the presence of hyphae of candida albicans. The lesion was surgically removed and the patient is well and healthy eight months later.

DISCUSSION

The above cases demonstrate the precancerous potential of speckled leukoplakia. When encountered, the lesion must be viewed with

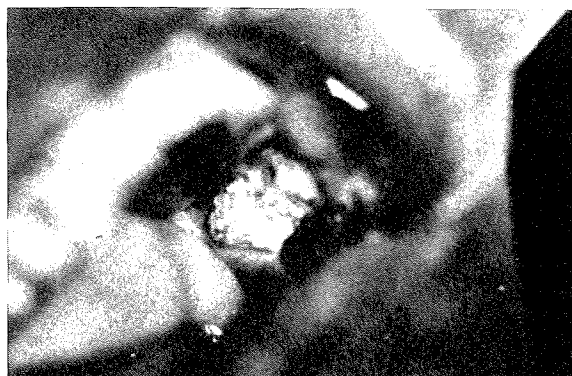


Fig. 2 Speckled leukoplakia on the left buccal mucosa. White elevated keratotic masses are seen within an area of erythema which suggested malignancy.

suspicion, and a biopsy must be carried out as soon as possible, so that a definitive diagnosis may be arrived at and proper treatment instituted. With leukoplakia, observation of the lesion alone without biopsy must be discouraged and deprecated. This is more so, as examination and biopsy-taking can be performed in the oral cavity with relative ease; an early diagnosis is mandatory for good management.

Jolly⁸ stated that a lesion may be regarded as malignant when one or more of the following signs are present: ulceration, induration, elevation, fungation and fixation. The authors agree with this statement as this claim was seen in one of our cases described. The first case did not show any of the above signs, and looked benign clinically. The second one had additional features of induration, erythematous periphery, and feeling of soreness. These are perhaps the salient features that distinguishes the stable speckled leukoplakia from the one that is undergoing transformation into malignancy.

It has been stated that speckled leukoplakia is frequently associated with candida albicans.^{9,10,11} Both of our cases showed the presence of candidal hyphae, the role of which is not very certain at the moment. Lehner and Shilitoe¹² believed that candida may cause leukoplakia, though there is little evidence to suggest that it can cause carcinomatous transformation in an existing leukoplakia. As these organisms can thrive well in altered tissue such as those found in leukoplakia, its presence may merely indicate a secondary infection. Speckled leukoplakia is best managed according to the degree of dysplastic changes of the associated epithelium. Pindborg¹³ suggested that

in severe epithelial dysplasia, surgical removal of the lesion is indicated possibly with skin grafting. The patient with slight to moderate dysplasia should be kept under strict surveillance and must be seen every 3-4 months. The above set of rules may not be as satisfactory as it seems, as carcinomatous changes in leukoplakia are known to have occurred in leukoplakias which showed no epithelial dysplasia.

Poswillo¹⁴ advocated the use of cryosurgery but Sako *et al*¹⁵ found a recurrence rate of 20 percent in his leukoplakia patients treated by cryosurgery. The use of high dosages of Vitamin A is not recommended as there is a high recurrence rate after withdrawal^{15,16} together with toxic side effect in the form of extreme hypertension that may lead to cerebrovascular accident.

The oral speckled leukoplakia is certainly a precancerous lesion. Its early recognition is most desirable. The management of such a lesion does not fall within the field of the general practitioner, but nevertheless when encountering it, it is his duty to refer the patient to a specialist at the earliest possible time.

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