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Erosive Lichen Planus to SCC: Role of histopathology

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Abstract

A 42 year old married male presented with a violaceous atrophic plaque on the lower lip with bleeding on manipulation for the last 8 years. Biopsy findings showed atrophic epidermis with effaced rete ridges and focal basal cell layer degeneration with lymphocytic band in the dermis, with parakeratotic horny pearls at places. Stratum corneum showed metaplastic changes. On the basis of histopathology, a diagnosis of lichen planus (LP) with well differentiated squamous cell carcinoma (SCC) was made. We are reporting this case as it is rare presentation with mucosal LP of lower lip evolving into SCC.

Introduction

Lichen planus is a common dermatologic disorder involving the glabrous skin, hair-bearing skin and scalp, nails, and mucous membranes of the oral cavity, penis, and vulva. There have been multiple case reports of squamous cell carcinoma developing within lesions of hypertrophic cutaneous lichen planus and erosive oral lichen planus.

Case Report

A 42 year old male came with the complaint of a chronic, painful, non healing ulcer on the mucocutaneous junction of the lower lip since 8 years. The patient had tried various topical and oral treatments with only partial recovery and recurrence. The patient was a tobacco chewer and smoker since 20 years.

On examination, there was a violaceous plaque on the lower lip, with well defined border and regular margins. An erosion was present in the centre. On palpation, the border was not indurated. There was bleeding on manipulation. There was no cervical or axillary lymphadenopathy. **(Fig 1)**



Fig 1: Lesion on the lower lip, present for 8 years.

Routine investigations were within normal limits. Skin biopsy was done, which showed atrophic epidermis with effaced rete ridges and focal basal cell layer degeneration with lymphocytic band in the dermis, with parakeratotic keratin pearls at places. Stratum corneum showed metaplastic changes and few atypical keratinocytes were seen in the sub-epidermal region. On the basis of histopathology, a diagnosis of lichen planus with well differentiated SCC was made. **(Fig 2, 3)**

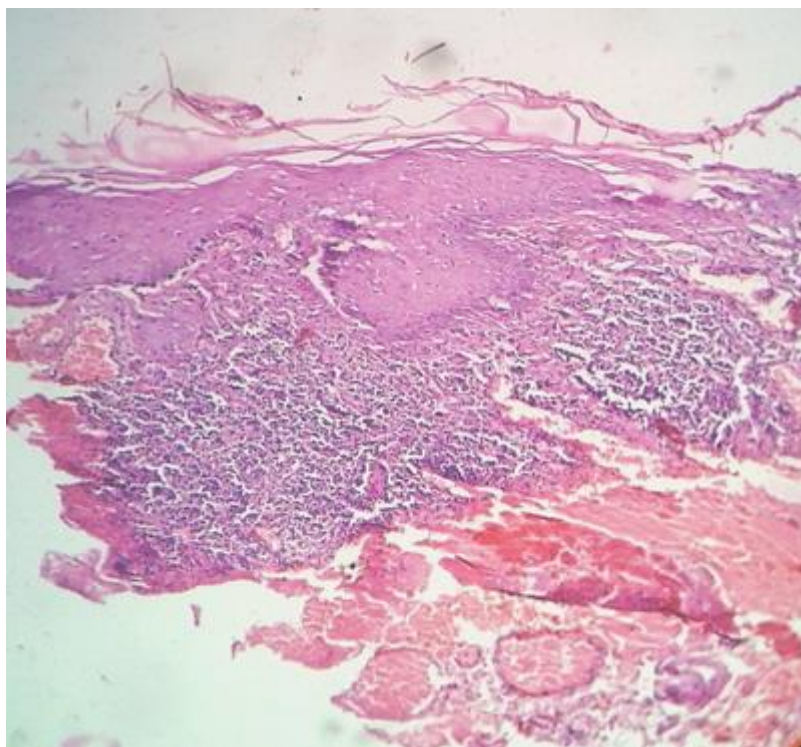


Fig 2: Histopathology showing band like infiltrate at the dermoepidermal junction and basal cell layer degeneration with parakeratotic keratin pearls.

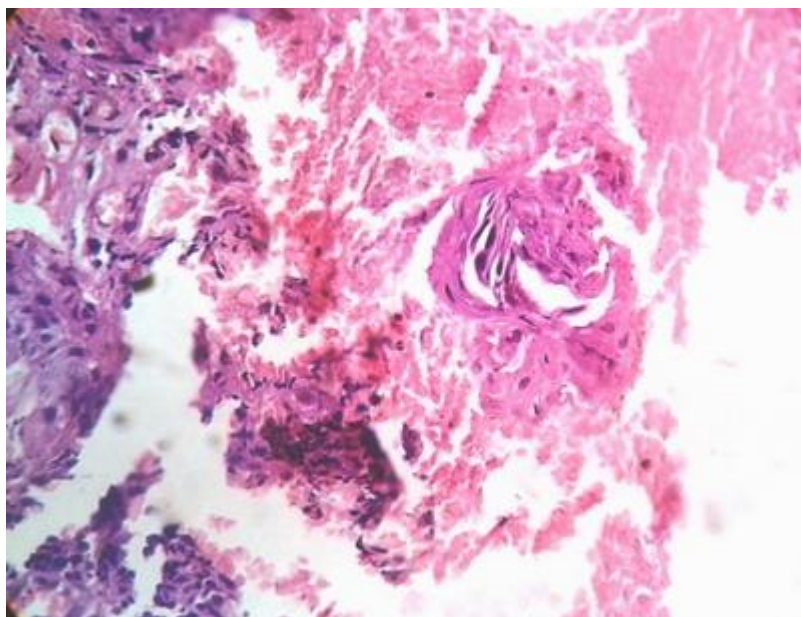


Fig 3: Histopathology showing degenerated basal cells along with keratin pearl.

The patient was managed with surgical excision with flap rotation for lip reconstruction. Histopathology revealed disease free margins.

Discussion

Oral lichen planus (OLP) is a chronic inflammatory mucocutaneous condition which affects approximately 0.2% to 3.8% of the general population, being more frequent in females.[1] The rate of malignant transformation in OLP is about 0.4% to 1.74%.[2]

In a study conducted in 611 patients by Holmstrup et al, 9 patients (1.5%), 8 women (1.9%) and 1 man (0.5%) developed oral squamous cell carcinomas (SCC) in areas of lichen planus lesions. OLP cases showed a 50-fold increase in development of carcinoma as compared to age and sex matched controls in the general population.[3]

Oral LP has an intrinsic property predisposing to neoplastic transformation. Hence, it is necessary to follow-up the patients regularly at least annually and possibly for life for the early diagnosis of a possible neoplastic degeneration. These consideration are particularly important in the case of atrophic or erosive OLP, and plaque OLP, especially when involving the dorsum of tongue.[4]

This highlights the importance of histopathology and role of serial biopsies in early detection and timely management of SCC developing in OLP lesions.

References

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