Hypertrophic Lichen Planus on lip Mimicking SCC

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Abstract

a 45-year-old male patient that presented with a verrucous hyperkeratotic plaque on the lower lip mimicking Squamous Cell Carcinoma. However, oral examination revealed, reticulated white patches on the bilateral buccal mucosa, and a biopsy of the lip lesion revealed lichenoid dermatitis which led to the diagnosis of hypertrophic lichen planus

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Key Clinical Message : Oral, Lichen planus is an inflammatory condition with different subtypes that vary greatly in morphology and location; lichen planus on the lip presenting as a verrucous hyperkeratotic plaque has not been previously reported. Familiarity with the different clinical presentations of oral LP and its variants is essential for prompt diagnosis and effective treatment.

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Abstract

The lichen planus (LP) is an inflammatory and immune-mediated disorder that can affect the hair, mucous membranes, nails, and skin. Lichen planus rarely affects the lips. When it affects the lip presents as radiated streaks, lace-like papules, and erosions. There is no report of lip LP presenting as Hypertrophic plaque.

Here we report interesting and rare clinical presentations of LP in a 45-year-old male patient that presented with a verrucous hyperkeratotic plaque on the lower lip mimicking Squamous Cell Carcinoma. However, oral examination revealed, reticulated white patches on the bilateral buccal mucosa, and a biopsy of the lip lesion revealed lichenoid dermatitis which led to the diagnosis of hypertrophic lichen planus.

Familiarity with the different clinical presentations of LP and its variants is essential for prompt diagnosis and effective treatment.

Introduction

The lichen planus (LP) is an inflammatory and immune-mediated disorder that can affect the hair, mucous membranes, nails, and skin.[1, 2] Oral lichen planus (OLP) is a common presentation of lichen planus that can occur alone, or accompanied by cutaneous or other mucosal manifestations.[1] OLP presents as white striations, white plaques, erythema,erosions or vesicles affecting predominantly the buccal mucosae, tongue, and gingivae.[1]

Lichen planus rarely affects the lips.[3] Lip involvement can occur isolated or with cutaneous or oral lesions. Clinical features include radiated streaks, lace-like papules, and erosions.[4] There is no report of Hypertrophic type on the lip. Here we reported a rare case of oral lichen planus presenting as verrucous plaque arising on the lower lip and as far as we know, this is the first reported case.

Case Presentation

A 45 years old man with no specific past medical history presented with a verrucous painless lesion on the midline of his lower lip for 3 months. The patient was not a smoker and also denied using tobacco or alcohol. His drug history was unremarkable and no new medication was started during this period of time.

On examination hyperkeratotic, verrucous plaques with peripheral hyperpigmentation on the lower lip was evident.(figure 1,a) The upper lip was uninvolved. Intraoral examination revealed white, reticulated patches on the bilateral buccal mucosa (figure 1,b). A complete examination of the skin, nail, and other mucous membranes was normal.

Punch biopsy of the lesion revealed parakeratotic hyperkeratosis with an inflammatory infiltrates predominantly composed of lymphocytes along the dermal-epidermal junction. There were some apoptotic keratinocytes, but no evidence of keratinocyte dysplasia or squamous cell carcinoma (SCC) was seen (figure 2,a,b). These features were considered to be those of lichenoid dermatitis and most consistent with lichen planus.

The patient was prescribed topical tacrolimus 0.1% and clobetasol ointment be applied locally twice a day. He was also treated with intralesional triamcinolone (10mg/ml) monthly for 3 months.

There was considerable healing in the lip lesion during the follow-up period (figure 3). However, 2 months later recurrence was noted in the same site then oral prednisolone (20mg per day) and mycophenolate mofetile (1g twice a day) were added to the previous treatment.

Discussion

hypertrophic lichen planus (HLP) is a variant of LP, that typically presents with hyperkeratotic papules, plaques, and nodules on the lower extremities.[5] Hypertrophic lichen planus can also affect the upper extremities and trunk, or it can also cause generalized lesions.[6] hypertrophic lichen planus on the lip has not been previously reported.

Lip involvement in lichen planus is quite rare.[3] lip lesions are more commonly observed in conjunction with cutaneous and/or oral LP but rarely occur isolated. Typical presentation includes an erythematous patch with white radiated peripheral streaks, other Clinical picture includes lacelike papules, and erosions.[3-5]

The clinical presentation of our patient's lip lesions as hyperkeratotic plaque mimicked those of actinic cheilitis, SCC, chronic HSV verrocus ulceration, pemphigus vegetan, and discoid lupus erythematous(DLE) while reticulated patches on the bilateral buccal mucosa on oral examination and pathologic findings were indicating of true diagnose of lp.

Histopathological features of lip lichen planus are the same as cutaneous or mucosal LP.[7] Characteristic Histological findings of lichen planus include acanthosis, parakeratosis, hypergranulosis, as well as hydropic degeneration of the basal layer, and lymphocytic infiltration at the dermo-epidermal junction in a band like manner.[7]The Presence of numerous Degenerative keratinocytes, known as colloid or Civatte bodies, in the papillary dermis and the lower epidermis is a frequent finding in lichen planus.[7]

Treatment of hypertrophic LP lesions is similar to other LP variants,[2] topical, intralesional, or oral corticosteroids are the first-line treatments. For those patients who do not respond to corticosteroid therapy, Successful treatment has been shown with mycophenolate mofetil, acitretin, cyclosporine, and biologics (adalimumab, alefacept, efalizumab). [2]

hypertrophic LP is a potentially malignant condition. Malignant transformation of hypertrophic LP to squamous cell carcinoma (SCC) has been documented in studies[8]; then in such cases, long-term follow-ups

are required.

Conclusions

Oral, Lichen planus is an inflammatory condition with different subtypes that vary greatly in morphology and location; However, the histopathological findings are generally consistent among the subtypes. Therefore, histological examination is valuable in confirming LP diagnosis in some cases with atypical presentation. Familiarity with the different clinical presentations of oral LP and its variants is essential for prompt diagnosis and effective treatment.

Figure legends:

Figure1 : hyperkeratotic, verrucous plaques with peripheral hyperpigmentation on the lower lip (a), white, reticulated patches on the buccal mucosa(b)

Figure 2 : polypoid and acanthotic epidermis with band like infiltration of chronic inflammatory cells in subepidermal stroma (a) ×10. Scattered apoptotic keratinocytes (Civatte bodies) (b) ×40.

Figure 3: Considerable healing of the lip lesions, with monthly intralesional triamcinolone (10mg/ml) for 3 months.

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