

Concurrent autoimmune orofacial lesions: A rare occurrence!

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Abstract

Autoimmune disorders occur either as a solitary lesion or in pairs, but it is unusual to find two autoimmune disease lesions in the oral cavity in a single patient, who has been previously treated for psoriasis. We present the case of a 30-year-old male who presented with complaints of severe burning in the oral cavity. Examination revealed the presence of co-occurrence of vitiligo with oral lichen planus with a history of psoriasis and was managed conservatively with good response to treatment.

Keywords: Autoimmune, lichen planus, psoriasis, steroids, vitiligo

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INTRODUCTION

Dermatological lesions, to name a few like the pemphigoid, pemphigus, psoriasis, and vitiligo are autoimmune in nature. Each of these lesions has unique pathophysiology, and the co-existence of these lesions is quite rare. There are few reports of these cutaneous immunological lesions occurring in pairs.^[1-3] Concurrent orofacial autoimmune lesions have not been reported frequently. We report such a patient with concurrent presence of perioral vitiligo and oral lichen planus (OLP) who was previously treated for psoriasis of the scalp.

CASE REPORT

A 30-year-old male patient, nontobacco chewer and with no comorbidities reported with complaints of

burning sensation in the mouth of 3 months' duration. Previously (16 years), he had been treated for psoriasis of the scalp and at present was symptom-free. Extraoral examination revealed perioral hypopigmentation of the skin [Figure 1a], but no lesions were observed on the extremities, genitalia, or nails and were clinically concluded to be vitiligo. Intraoral examination revealed whitish nonhomogenous striae that were located bilaterally and localized on the mucosa of the cheek [Figure 1b and c]. Similar whitish irregular lesions were observed on the dorsum of the tongue [Figure 1d]. Although the patient did not have any dental fillings or prostheses, the oral hygiene was poor with deposits on the tooth surface. There was no clinical finding suggestive of any type of systemic autoimmune connective tissue disorder. The patient underwent oral prophylaxis, followed by a biopsy

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from the lesions on the oral mucosa, which histologically showed hyperkeratosis with irregular acanthosis and focal thickening in the granular layer, Civatte bodies in the lower epidermis, a band-like inflammatory infiltrate composed of histiocytes and lymphocytes, mainly T-cells, localized in the superficial dermis, thus confirming the diagnosis of OLP [Figure 2]. On the basis of the clinical and histological findings, the diagnoses of vitiligo and OLP were established and he was started on photochemotherapy for vitiligo and systemic antioxidant therapy, emollients and intrabuccal steroids for OLP. The patient has been kept under close follow-up and has shown improvement of the lesions.

DISCUSSION

Psoriasis-associated cutaneous LP is fairly common. Psoriasis may also be associated with other autoimmune diseases such as vitiligo, pemphigus vulgaris and alopecia areata.^[1] Till date, only a single case of combination of psoriasis, vitiligo and OLP has been reported in literature.^[4] The unique feature in our patient was that perioral vitiligo appeared associated with OLP in the absence of cutaneous LP lesions. There are the reports of cutaneous form of LP and vitiligo coexisting and reason for such associations remains ambiguous. However, an autoimmune background has been strongly implicated in these disorders with abnormal T-cell-mediated immune responses. An alteration in the expression of antigens on to the melanocyte due to photo damage or actinic damage in vitiligo results in the stimulation of T-cells with the autoimmune destruction of basal keratinocyte could be the common pathogenic link between LP and vitiligo.^[2-4] Although our patient gave a previous history of psoriasis, no active lesions were seen and the patient would have been in a remission phase. Both psoriasis and LP are known to show Koebner phenomenon.

Tumor necrosis factor-alpha may represent a common link in the pathogenesis of vitiligo and psoriasis and needs to be further investigated.^[5] In recent years, there are a growing number of reports indicating cytokine imbalance with an excess production of interferons-alpha and T-cell mediated autoimmunity. It is speculated that activation of both CD4+ and CD8+ T-cells may be responsible for the coexistence between psoriasis and LP.^[6]

Despite the advances in the last decades, the cause of psoriasis is still unknown. Recent data strongly indicate that human leukocyte antigen-Cw0602 is the susceptible allele in this locus.^[7] T-helper (Th) 17/interleukin (IL-23) pathway and IL-22 have been found to play a prominent role in the pathogenesis of psoriasis.^[8] Although there are reports of hypersensitive material such as dental fillings causing OLP,^[9] our patient did not have any such foreign material in the oral cavity and we attribute the various type of exogenous/endogenous factors such as stress since our patient and had lost his job. The management of these patients requires an individualized approach toward each lesion to have a good response and disease control.

CONCLUSION

Although cutaneous immunological lesions occurring in pairs are known and documented, concurrent orofacial lesions are extremely rare and require an individualized approach toward the management of these patients.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given his consent for his images and other clinical information to be reported in the journal. The patient understands that



Figure 1: (a) Hypopigmented areas of the lip, (b and c) Bilateral whitish striae, (d) Lesions on the dorsum of the tongue

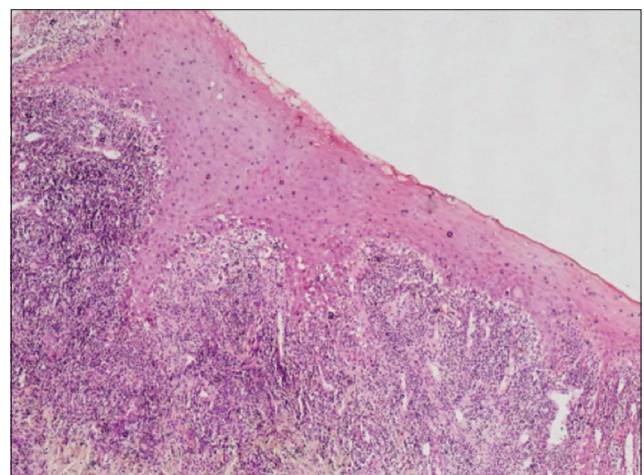


Figure 2: Photomicrograph showing para to nonkeratinized epithelium, focal areas of acanthosis, saw tooth rete pegs and dense band of chronic cell infiltration in the lamina propria (H&E, ×100)

his name and initial will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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