Oral Reticular Lesions of A 61-Year-Old Woman

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Abstract

A 85-year-old Brazilian woman presented with a 3-months history of oral lesions. She reported a long use of hydrochlorothyazide and losartan for systemic arterial hypertension and levotiroxin for hypothyroidism. Additionally, she reported to have hepatitis C. The rest of her medical history was non-contributory. Physical examination revealed multiple white, reticulopapular lesions in bilateral buccal mucosa, tongue and gingiva. There was no regional lymphadenopathy. Laboratory studies including urinalysis, blood count and blood chemistry were all within the normal range.

Key Words: Oral lesions; Adverse cutaneous drug reaction; Lichenoid eruption

Clinical Findings

A 85-year-old Brazilian woman presented with a 3-months history of oral lesions. She reported a long use of hydrochlorothyazide and losartan for systemic arterial hypertension and levotiroxin for hypothyroidism. Additionally, she reported to have hepatitis C. The rest of her medical history was non-contributory.

Physical examination revealed multiple white, reticulopapular lesions in bilateral buccal mucosa, tongue and gingiva (*Figure. 1a,1b,1c,1d*). There was no regional lymphadenopathy. Laboratory studies including urinalysis, blood count and blood chemistry were all within the normal range.

Histopathological Findings

Biopsy of the buccal mucosa lesion was performed. Histological examination (*Figure. 1e, 1f, 1g*) revealed epithelial atrophy, marked spongiosis, hydropic degeneration with widespread necrosis up to suprabasal layers. Additionally, histopathology showed heavy lymphocytic predominant lichenoid infiltrate, with presence of eosinophils. Inflammatory infiltrate was present around vessels in mid and deep lamina propria. Prominent interstitial edema and vascular congestion were also present. PAS staining did not show thickening of basement membrane. Stains for fungi and mycobacteria gave negative results.

Diagnosis

Oral lichenoid drug reaction.

Discussion

Lichenoid drug reactions described a group of cutaneous reactions that are clinically and histopathologically similar to the idiopathic lichen planus lesions, making its diferential diagnosis difficult. It accounts for approximately 4% of all adverse cutaneous drug reaction [1-6]. However, while oral involvement is a commom manifestation in patients with lichen planus, oral involvement in lichenoid drug reaction is rare and occasionally it can be severe. The reports of oral lichenoid drug eruptions are considerably fewer than those of cutaneous eruptions and fewer drugs have been reported as causing oral rather than cutaneous lichenoid eruptions [1-5].

The exact incidence of oral lichenoid drug reaction (OLR) is unknown and the pathogenesis is unclear. The onset of a drug related lichenoid reaction and initial medication use vary widely, from weeks to over a year. No standardized criteria for the diagnosis exist, however if a temporal relationship can be identified discontinuing the offending medication is recommended. The lesions can take many months or longer to resolve. Similar to oral lichen planus (OLP), OLR can present clinically with either reticular or erosive patterns but unlike OLP that is a multifocal and/or bilateral disease, OLR lesions often present as a single lesion. However, our patient presented multifocal and bilateral disease.

Reported medications that can cause OLR include antihypertensives, nonsteroidal inflammatory drugs, antimalarials, and HIV antiretrovirals. It is well established that thiazide diuretics may cause photodistributed lichenoid lesions mainly in the skin [4,5].

However, oral lichenoid reaction is rarely associated with this medication. Only few reports showing this association are described in the literature [1-3]. The presented case had been using hydrochlorothiazide for many years and the lesions began just 3 months ago. No other patient's medication has ever been related to OLR.

Diagnosis of OLR is based on the medical history of the patients, on the characteristic histopathological findings complemented by the observation of improvement of the condition after withdrawral of the medication, as occurred with our patient.

The microscopic features of drug-related lichenoid lesions share many similarities to OLP with important differences. The inflammatory infiltrate in OLR is more diffuse and extends deeper into the lamina propria rather than the band-like infiltrate seen in OLP. In addition to lymphocytes both plasma cells and eosinophils may be seen, as our case. Increased numbers of dyskeratotic keratinocytes (colloid or Civatte bodies) may be present in OLR compared to OLP. A

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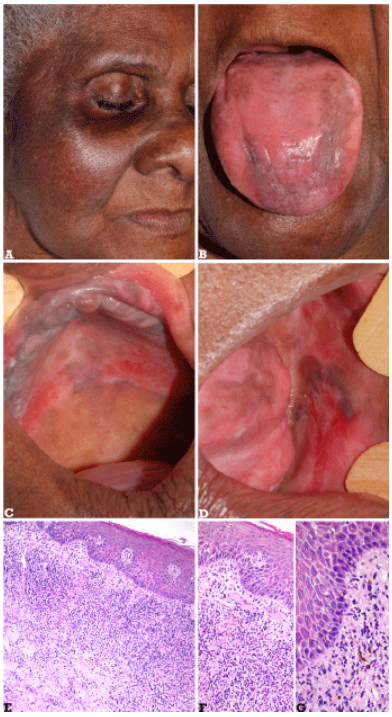

Figure 1. *Facial hyperpigmentation (1a); Multiple white, reticulopapular lesions in tongue (1b), gingiva (1c) and bilateral buccal mucosa (1d). Histopathology (1e,1f,1g) shows pithelial atrophy, spongiosis, hydropic degeneration with necrosis up to suprabasal layers, lymphocytic predominant lichenoid infiltrate, with presence of eosinophils. Inflammatory infiltrate was present around vessels in mid and deep lamina propria. (Hematoxylin and eosin stain, original magnification x100 [e], x250 [f,g])*

perivascular chronic inflammatory cell infiltrate can be seen in drug related lichenoid lesions, which is an uncommon finding in OLP. However, these microscopic features are not specific and rely on clinical information including a temporal association with any systemic medications.

Lichenoid drug eruptions may also show some histological characteristics of oral discoid lupus erythematosus [7]. Comparison of histopathological features of OLR with those of LE included some differences: thicker basement membrane in LE (HE and PAS), PAS positive thickening of blood vessel walls in LE, deeper perivascular infiltrates in LE and more pronounced epithelial atrophy in OLR [7]. The presence of mucin in the lamina propria is an important clue in differentiating LE from OLR. In our case, the patient did not present any of the clinical and histopathological features of LE. Also, laboratory abnormalities and antinuclear antibodies were not observed. Other differential diagnoses of OLR include oral candidiasis, secondary syphilis, oral hairy leukoplakia, morsicatio buccarum and other traumatic injuries.

It was reported a case of lichenoid eruption triggered by medication, exclusively located in the oral mucosa. Withdrawal of the drug is fundamental for improvement of the disease, as occurred with our patient. Subsequent treatment is symptomatic, but severe cases may require corticosteroid therapy.

Conflict of Interest

None

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