

## Lichenoid drug eruption due to eprosartan/hydrochlorothiacide

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## Abstract

We report a case of a 66-year-old male who developed an itchy eruption while taking an antihypertonic drug containing eprosartan and hydrochlorothiacide after sun exposure. The lesions resembled a lichenoid appearance that was confirmed by the histological study. There are few reports in the literature of lichenoid reactions to these compounds, so we review the characteristics of themselves as a potencial cause of drug eruptions.

## **Case Report**

A 66-year-old male attended to our outpatients clinic presenting a 2 months history of an itchy skin eruption. It has not been controlled with topical steroids and antihistamines ruled by his general practitioner. No personal or family history of atopy or other allergic diseases were referred. He had a history of high blood preasure that was under control with eprosartan 600 mg/hydrochlorotyacide 12.50 mg for the last 7 months.

On skin examination we could appreciate multiple red papules and plaques on the chest, both forearms (the site where the eruption begun regarding the patient's comments), back and thighs (Figures 1, 2). Some papules had a fine pityriasiform scaling. There was no commitment of the cephalic pole. Wickam's striae were not seen. Dermographism was normal. There were no lesions of lichen planus in the oral cavity.

Blood count test, general biochemistry, ANA, ESR (erythrocyte sedimentation rate) and hepatic viral serology were ordered and showed normal results. The histological examination revealed epidermal hyperplasia with orthokeratosis, focal hypergranulosis, hydropic degeneration of the basement membrane zone and lichenoid-like lymphocytic infiltrate in the papillary dermis (Figure 3).

Patch test according the Spanish Contact Dermatitis Group (True test<sup>®</sup>) were performed and also the antihypertensive drug (Teveten Plus<sup>®</sup>). Single substances (eprosartan and hydroclorothiacide) were also tested. We found only positivity in the patch of the compound drug. Seven control subjects were tested with Regarding the clinical, histological and patch test results, lichenoid drug eruption due to the intake of eprosartan/hydroclorothiacide was made. We proceed to discontinuate the treatment with the antihypertensive drug and we administrated 1 mg/kg/d of prednisone. In two weeks the eruption healed, so we started to get down cortichosteroids. Dark-brown macular hyperpigmentation of some of the skin lesions were presented.

Eprosartan is an angiotensin II receptor antagonist (angiotensin II receptor blocker) used in the treatment of hypertension. In large, randomized trials, eprosartan (with or without hydrochlorothiazide [HCTZ]) demonstrated superior antihypertensive efficacy to that of placebo, but the use of eprosartan in combination with HCTZ tends to reverse the potassium loss associated with thiazide diuretics. The incidence of cutaneous adverse events is quite low.<sup>1</sup>

On the other hand, the potential of the thiazide group to cause cutaneous reactions as eczematous reactions, erythema multiforme and lichenoid changes have been widely reported.<sup>2</sup>

The use of these two drugs together is relatively recent and therefore the number of reported skin reactions is also very low. There has just been one case reported of lichenoid drug reaction with the compound of irbesartan and hydroclorothiacide. Pfab *et al.*<sup>2</sup> explained that the negative patch test to the single substances could be interpreted as a compound allergy. The combination of these two substances may produce a neoantigenic effect.

Lichenoid drug eruptions are commonly associated with gold, antimalarials, thiazides and phenotiazines. We should note that although the morphology of lichenoid eruptions is reminiscent of lichen planus, the following differences may occur.<sup>3</sup> i) beginning as hyperpigmented lesions or eczematous lesions; ii) do not present Wickham striae on



Figure 1. Confluent eruption of erythemato-violaceus plaques on the chest.

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Key words: lichenoid eruption eprosartan hydrochlorothiacide.

Received for publication: 21 August 2011. Accepted for publication: 24 August 2011.

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Figure 2. Cutaneous affection of the forearm.

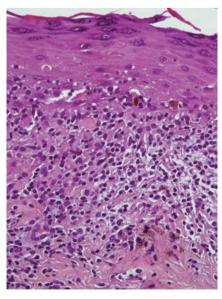


Figure 3. Epidermal hyperplasia with hyperkeratotic foci, lichenoid dermatitis and lichenoid-like lymphocytic infiltrate in the papillary dermis.

their surface; iii) do not affect mucous membranes not the nails; iv) sometimes have a typical distribution in photoexposed areas and v) Intense presence of eosinophile in the inflammatory infiltrate.

For severe generalized lichen planus eruptions, systemic corctichosteroids are effective. In prolonged treatments other therapeutical options could offer good results as sulfasalazine,<sup>4</sup> methotrexate,<sup>5</sup> azathioprine,<sup>6</sup> interferon alfa 2b,<sup>7</sup> alefacept,<sup>8</sup> thalidomide<sup>9</sup> or enoxaparine.<sup>10</sup> It is really important to choose the most adequate treatment depending on the severity and the basal status of the patient at time of diagnosis.

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