Lupus erythematosus-like Eruption from Captopril

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A patient on Captopril treatment is reported. This patient developed a dermatitis that clinically recalled a gyrate subacute lupus erythematosus and showed lichenoid features on light microscopy. Key words: Captopril; Drug eruption. (Received February 25, 1985.)

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Fifteen per cent of the patients treated with the antihypertensive agent Captopril experience an adverse cutaneous reaction that may present with diverse morphology. We describe a patient who developed a distinctive annular erythematous-papular eruption on the sun-exposed areas that resembled subacute lupus erythematosus.

CASE REPORT

A 53-year-old man with a history of diabetes and heart failure was on nifedipine 10 mg/day, digoxine 0.125 mg/day, tolbutamide 500 mg b.i.d., furosemide 12.5 mg/day and Captopril (Capoten®, Squibb) 50 mg b.i.d. After six months of such treatment, itchy, dark-red colured, 3–5 mm large papules developed on the sun-exposed areas. The largest annular lesions derived from the coalescence of the original papules and, having a slight central depression with scaling, had a lupus erythematosus-like appearance. Within 48 hours after Captopril withdrawal the eruption subsided to relapse ten days later when the patient took one more tablet of the drug.

Histopathology (Fig. 1) revealed a lymphocytic infiltrate in the upper dermis invading and disrupting the epidermis in a lichenoid fashion. Direct immunofluorescence showed a linear deposition of fibrinogen along the dermo-epidermal junction and clusters of IgA and IgG fluorescent bodies in the upper dermis.

The following laboratory tests were negative or within normal values: complete blood cell count, ESR, BUN, creatinine, C reactive protein, rheumatoid factor, serum albumin, gamma globulins, LE cell phenomenon. ANA were absent at 1/40 dilution. Glucose blood level was increased to 231 mg% and so was glycosuria (3 g%).

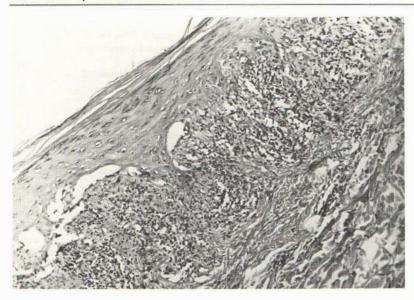


Fig. 1. Lymphocytic infiltrate in the upper dermis invading and disrupting the epidermis in a lichenoid fashion.

COMMENT

Clinically the eruption in our patient recalled subacute lupus erythematosus for both its gyrate morphology and localization to the sun-exposed areas. Although the patient was on a complex medication, the disappearance of the lesions after Captopril discontinuation and their relapse with challenge incriminated the drug.

Skin eruptions from Captopril include pityriasis rosea-like rashes (1), alopecia and nail dystrophy (2, 7), pemphigus (3), exfoliative erythroderma (4) and lichenoid eruptions (5), but a lupus erythematosus-like eruption has never been reported. Such clinical presentation, however, was in striking contrast with its histopathology and direct immunofluorescence that showed indisputable lichenoid features. This appears to be the case also for most of the patients who have been reported to have experienced "lichenoid eruptions" from Captopril (5, 6). The epithelial aggression, furthermore, seems to be common to the various cutaneous side effects of the drug, owing perhaps to the presence of sulfhydryl groups in both its molecule and in keratinocytes.

Of interest is also the localization on sun-exposed areas. Photosensitivity has never been recorded as a side effect of Captopril although Brueggemeyer and Ramirez (7) suggested it in their letter on onycholysis associated with the drug.

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