

## Erosive Lichen Planus on an Atypical Site Mimicking a Factitial Dermatitis

Carmelo Schepis<sup>1</sup>, Maria Lentini<sup>2</sup> and Maddalena Siragusa<sup>1</sup>

<sup>1</sup>Unit of Dermatology Oasi Institute (IRCCS), Via Conte Ruggero, 73, IT-94018 Troina, and <sup>2</sup>Department of Human Pathology University of Messina, Italy.

E-mail: cschepis@oasi.en.it

Accepted October 29, 2009.

Sir,

Lichen planus (LP) is a papulous dermatitis including several clinical variants. The erosive lichen planus form (ELP) mainly involves the oral cavity and/or the genitalia (1, 2). In those rare cases where oral mucosa is not involved, ELP seems to affect genital areas mainly in the female gender (2). Only a few cases of ELP involving the plantar surface have been reported (3, 4). Onychotrophy is a form of plantar ELP; in our opinion, this specific diagnosis makes it possible to distinguish between this form and psoriasis (5). We have previously described two uncommon cases of ELP involving neither the oral mucosa nor the genitalia. In the first case, a man, the groin was affected, while in the second case, a woman, ELP was found in the plantar areas (5). We report here the case of a patient with ELP affecting the back as well as the pretibial area.

### CASE REPORT

A 56-year-old man, employed as a manager, who was an inveterate smoker with a very stressful life, was referred to our unit for the onset and progressive worsening, over a period of a few months, of a papulous and pruriginous dermatitis involving the upper back (Fig. 1a), both sides of the nostrils, and the lower limbs, where the lesions had a whitish border (Fig. 1b) resembling that of Wickham's striae. Lesions in all sites appeared as erosive papules, lilac-pink in colour, and merged into plaque in the back. The oral mucosa revealed a mild symmetrical reticular lichen planus; moreover, some fingernails had a grooved appearance. The genitalia, palms and soles were spared.

At punch analysis of the eroded area of the back, the epidermis was centrally ulcerated and invaginated, and, at the ulcer edges, it showed vacuolar degeneration of the basal layer. A band-like chronic inflammatory infiltrate was present in the upper dermis. The inflammatory infiltrate was predominantly sustained by lymphocytes with some macrophages. Focally, a few lymphocytes penetrated the overlying epidermis (Fig. 2). The routine blood tests were within the normal range, including the markers for B and C hepatitis; the anti-nuclear antibodies and the tests for syphilis were negative. A diagnosis of ELP was therefore made.

Low-dosage (3 mg/kg/day) cyclosporin A (CyA) treatment and daily application of a strong steroid ointment produced a rapid (in one month) clinical improvement. After an arbitrary discontinuation of the therapy, a partial relapse was seen approximately one month later; the patient was therefore prescribed oral cortisone by the general practitioner. A few months later, the patient had an ischaemic heart attack; consequently, our observations ceased.

### DISCUSSION

The clinical/histological analysis confirmed our diagnosis of ELP, thus excluding possible diagnosis for self-injury dermatitis, or discoid or subacute form of cutaneous lupus erythematosus. Lesions in the oral cavity, as well as histopathological analysis, further contributed to confirm our diagnosis. In our opinion, this case would fall into the "pseudo-factitial dermatitis" range; a skin condition that is usually misdiagnosed as dermatitis artefacta (6). In similar cases, a histopatholo-

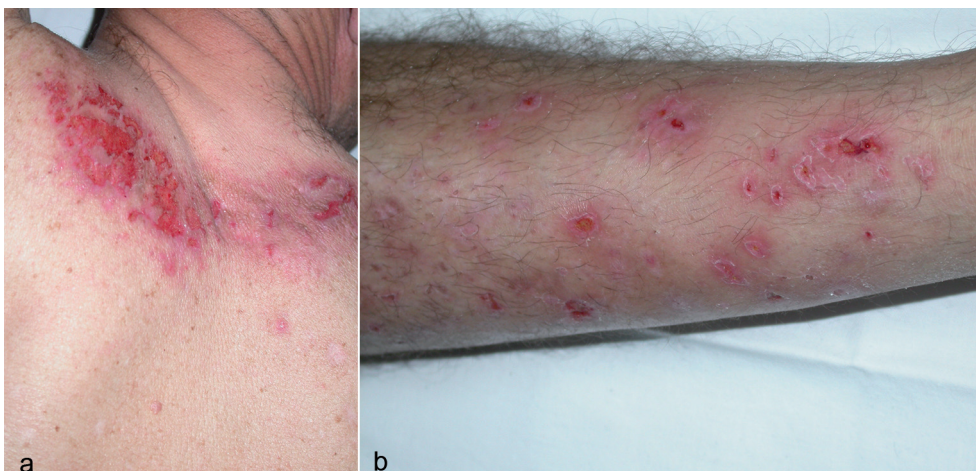
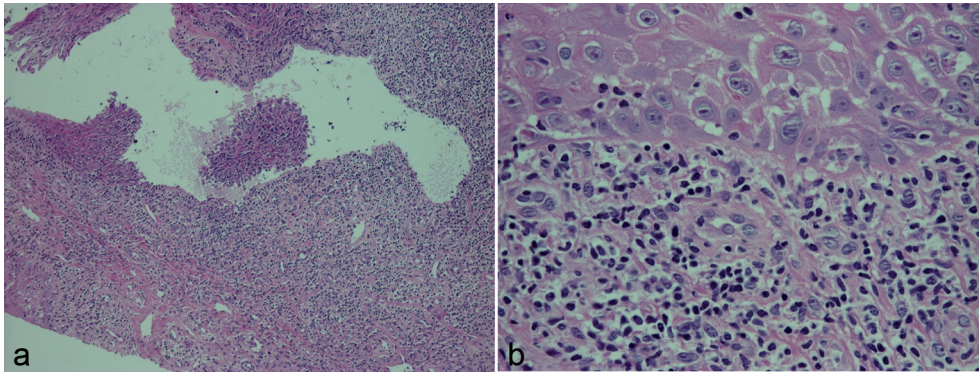


Fig. 1. (a) Erosive plaques on the upper back. (b) Confetti-like papules on the pretibial area.



*Fig. 2.* (a) Typical band-like heavy infiltrate of lymphocytes beneath the ulcerated epidermis. (b) Vacuolar degeneration of the epidermal basal layer (haematoxylin and eosin; H&E).

gical investigation is absolutely required. Our diagnosis was further confirmed by a recent observation of two cases of ELPs (5) occurring in unusual sites.

Drug therapy with CyA, using an appropriate dosage for each patient, was found to be an excellent treatment for inflammation (5), often allowing the patient to have a satisfying quality of life. Indeed, CyA has a strong inhibitory effect on T lymphocytes. The application of a steroid ointment was combined with drug therapy in order to accelerate the response to CyA. This association even allowed us to slightly decrease the dose of CyA. The effective use of topical tacrolimus, suggested as an alternative to oral CyA, needs to be confirmed for affected areas other than the genitals or oral mucosa, where percutaneous penetration is facilitated (7).

In conclusion, ELP is an aggressive variant of LP, often involving the oral cavity, and sometimes occurring in the genitalia; however, it does not spare folds, plantar regions or, as evidenced in our case, other atypical sites.

## REFERENCES

1. Mollaoglu N. Oral lichen planus: a review. *Br J Oral Maxillofac Surg* 2000; 38: 370–377.
2. Lotery HE, Galask RP. Erosive lichen planus of the vulva and vagina. *Obstet Gynecol* 2003; 101: 1121–1125.
3. Parodi A, Ciulla P, Rebora A. An old lady with scarring alopecia and an ulcerative sole. *Arch Dermatol* 1991; 127: 405–410.
4. Patrone P, Stinco G, La Pia E, Frattasio A, De Francesco V. Surgery and cyclosporine A in the treatment of erosive lichen planus of the feet. *Eur J Dermatol* 1998; 8: 243–244.
5. Schepis C, Siragusa M, Lentini M. Erosive lichen planus. Two uncommon cases. *Acta Derm Venereol* 2008; 88: 268–270.
6. Lachapelle JM, Bataille AC, Tennstedt D, Marot L. Pseudo-factitial dermatitis: a useful clinical and/or histopathological concept. *Dermatology* 1994; 189: Suppl 2: 62–64.
7. Petropoulou H, Kontochristopoulos G, Kalogirou O, Panteri I, Zakopoulou N. Effective treatment of erosive lichen planus with thalidomide and topical tacrolimus. *Int J Dermatol* 2006; 45: 1244–1245.