

Lymphomatoid contact dermatitis

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Fig. 1. Erythema, desquamation and severe thickening of the skin on the distal third of both forearms.



Fig. 2. Well-demarcated erythematous plaque that involved the ear and retroauricular area.

contact dermatitis, patch tests were performed using the European baseline series (Trolab Hermal, Reinbek, Germany), using Curatest® chambers (Lohmann Rauscher, Vienna, Austria),

fixed with adhesive tape (Omnifix; Hartmann, Heidenheim, Germany) and applied to a dermatitis-free area on the upper back. Readings were performed at D2 and D4 using Inter-

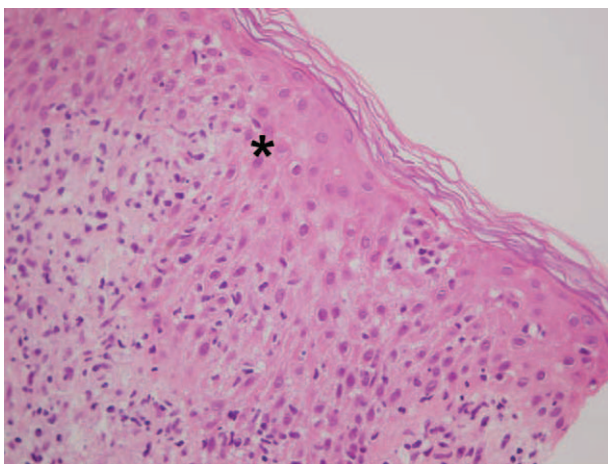


Fig. 3. Biopsy specimen from the forearm showing intense epidermotropism with moderate spongiotic microvesiculation. *, H-E $\times 10$.

national Contact Dermatitis Research Group criteria. *N*-isopropyl-*N'*-phenyl-phenylenediamine (IPPD) was applied twice at the same time. At D4, one of the IPPD sites showed erythema with vesiculation. A biopsy showed eosinophilic spongiotic dermatitis compatible with contact dermatitis. After D7, the other patch test site on which IPPD had been applied showed an erythematous plaque, and a biopsy of this was similar to the initial biopsy of a forearm lesion.

Using thin-layer chromatography, IPPD was determined to be present in scrapings of the pedal cables and the gloves. Based on the above findings, a diagnosis of lymphomatoid contact dermatitis was made.

Before the patient was moved to a different job, the lesions were treated with high-potency topical corticosteroids, which produced a moderate improvement. One month later, he was assigned to a different job and within 20 days, his skin had cleared up, with no recurrence during 2 years of follow-up.

Discussion

Lymphomatoid contact dermatitis is a chronic and persistent allergic contact dermatitis histologically similar to mycosis fungoides (1). It was described in 1976 by Gómez-Orbaneja et al. (2) in four patients with skin lesions clinically and histologically compatible with cutaneous lymphomas giving a positive patch test with the striker part of a match box, and who, after avoiding contact with this substance (phosphorus sesquisulphide) reported their lesions to have completely cleared. Prior to this, in 1974, Ackerman et al. (3) had coined the term 'spongiotic simulants of mycosis fungoides' to refer to these.

Lymphomatoid contact dermatitis forms part of the spectrum of lymphomatoid skin hyperplasias (4), also referred to as pseudolymphomas. These are a heterogeneous group of benign reactive T-cell or B-cell lymphoproliferative processes arising from a variety of causes and which mimic cutaneous lymphomas clinically and/or histologically (1). On occasion, they have been reported to develop into authentic lymphomas (4) or leukaemias (5).

There are two different histological patterns in T-cell cutaneous lymphoid hyperplasias: a band-like pattern usually seen in lymphomatoid contact dermatitis and lymphomatoid drug

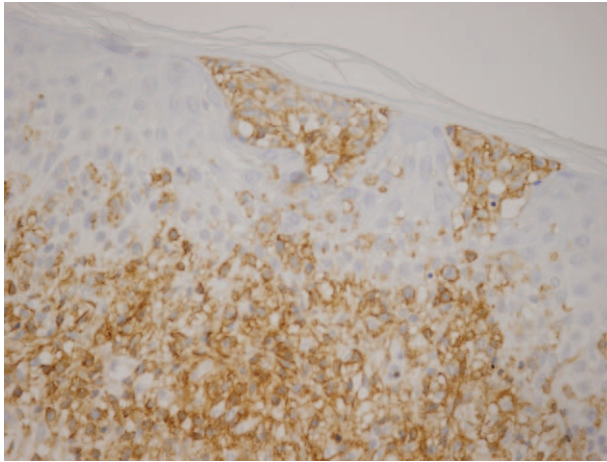


Fig. 4. CD45R0 was positive showing that the infiltrate was comprised of T-cells. (UCL-1 $\times 10$).

reaction (6) and a superficial and deep perivascular or nodular pattern seen in arthropod-bite reaction, nodular scabies and dilantin hypersensitivity reaction.

Histopathology of T-cell lymphomatoid contact dermatitis resembles mycosis fungoides and shows a superficial band-like T-cell infiltrate with epidermotropism (1). Epidermal spongiosis or spongiotic microvesiculation may be present, and this helps to differentiate it from mycosis fungoides (3), where there may be spongiosis but not microvesiculation. However, in most cases, it is histopathologically impossible to differentiate intraepidermal collections of mononuclear cells from the Pautrier's microabscesses of mycosis fungoides. In our case, the histology was compatible with mycosis fungoides, but the presence of spongiotic microvesiculation together with the clinical aspects of the lesions led us to suspect that we were dealing with a lymphomatoid contact dermatitis. This was confirmed with patch tests, a late biopsy of the IPPD patch test, the resolution of the lesions once contact with the causal agent had been withdrawn, and the confirmation of the presence of IPPD in the materials in contact with the skin.

Since the condition was first described, there have been reports of lymphomatoid contact dermatitis mimicking mycosis fungoides caused by phosphorus sesquisulphide (7), para-tertiary butyl phenol formaldehyde resin (8), *p*-phenylenediamine (9), ethylenediamine dihydrochloride (10), nickel (11, 12), cobalt naphthenate (13), gold (14), and two cases of

lymphomatoid contact dermatitis caused by IPPD (15).

Very few cases of allergen-induced B-cell cutaneous lymphoid hyperplasias have been described. They have been reported in relation with gold (16, 17), zinc (18), and IPPD (19).

We present a new case of lymphomatoid contact dermatitis induced by IPPD occurring in an occupational setting, in which a delayed skin biopsy demonstrated the histological development of lymphomatoid contact dermatitis on the IPPD patch area, 7 days after applying patch tests.

Lymphomatoid contact dermatitis is included in the differential diagnosis of cutaneous lymphoid hyperplasias with lymphomatoid histology, especially when clinical presentation is not suggestive of cutaneous T-cell lymphomas.

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