

SHORT COMMUNICATION

Imiquimod 5%: A Successful Treatment for Pseudolymphoma

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Cutaneous pseudolymphoma (CPL) is a condition with reactive lymphoproliferative processes of different causes. Histologically and clinically it has features similar to malignant cutaneous lymphomas, however, monoclonality is not present.

Treatments of CPL include oral antibiotics, cryotherapy, topical or intralesional corticosteroids. More widespread lesions can be treated with surgery or radiotherapy. Other treatment options include antimalarials and cytotoxic systemic therapies (1, 2).

We describe a recalcitrant case of facial CPL, but with a compelling response to topical imiquimod 5% (I5).

CASE REPORT

A 49-year-old man was referred with the histological diagnosis CPL. Gene rearrangement analysis demonstrated polyclonality in the T-cell receptor. There were no signs of malignancy, but clinically the patient presented a 6-month history of infiltrated red papules on the cheeks and nose. The patient presented no signs of systemic disease.

The patient was screened biochemically and no abnormalities were found. There were negative immunoglobulins for Lyme borreliosis and no antinuclear antibodies.

Topical treatment with group III steroids was initiated with some response, but due to lack of sufficient response the treatment was changed to antimalarials combined with topical tacrolimus 0.1%. This treatment was also stopped due to treatment failure and photodynamic therapy was attempted with some effect. Four months later there was a relapse and the following treatments were instigated: cryotherapy with liquid nitrogen with no effect, intralesional corticosteroids, photodynamic therapy and topical group IV corticosteroid. The treatment response was fair but only temporary and phototherapy was started with narrow-band UVB 3 times/week for 12 weeks with some effect. The patient also completed a 4-week course with oral penicillin 1.5 million international units, but with poor treatment response (Fig. 1, left). Topical treatment with the immunomodulator I5 5 times/week for 6 weeks was completed and resulted in total clearance of the CPL. A local reaction with moderate inflammation and crusting was observed, however, no relapse was observed 5 months post-treatment (Fig 1, right).

DISCUSSION

Topical I5 is an immunomodulator that binds to Toll-like receptor 7 expressed in antigen-expressing cells. This results in the transcription of genes involved in the immune response, with subsequent synthesis and release of cytokines and initiation of an inflammatory response (3).



Fig. 1. Treatment recalcitrant pseudolymphoma of the nose before (left) and after (right) imiquimod treatment.

A former case report (4) describes the off label use of I5 for stage IA cutaneous T-cell lymphoma with a good clinical response. We speculate that some of the same mechanisms, due to the ability of I5 to initiate an inflammatory response of Th1 cytokines and increase the NK-cell activity, are responsible for the good clinical response to CPL. The histological description of the biopsies showed predominantly T cells with CD4 positivity but also some CD8 positive T cells.

CPL may be difficult to treat, however, this case indicates that I5 may be an efficient treatment alternative with excellent cosmetic result. Mode of action needs further study.

The authors declare no conflict interest.

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