## LETTER TO THE EDITOR

## WILEY

# Pseudolymphoma successfully treated by etretinate

#### Dear Editor,

A 57-year-old man presented at our Dermatology Department with a 1.5-year history of facial lesions. Three years earlier, he developed erythema on the face. Although topical corticosteroid therapy produced temporary clinical resolution, the eruption relapsed 5 months before our initial examination. A biopsy specimen, performed at another hospital, showed lymphocytic infiltration of skin (Jessner-Kanof). Since the cutaneous lesions became resistant to topical corticosteroid therapy, he was referred to our hospital. He was also treated for diabetes mellitus, hypertension, hyperlipidosis, and gout. Physical examination revealed dark reddish, infiltrative erythematous lesions on the forehead, bilateral eyelids, and preauricular regions (Figure 1A). Complete blood cell counts and soluble interleukin-2 receptor (sIL-2R) were within normal limits: WBC 7400/µL (59.4% neutrophils, 30.2% lymphocytes, 6.1% monocytes, 3.8% eosinophils, and 0.5% basophils) and sIL-2R 326 U/mL. Histopathological findings demonstrated dense infiltrate of lymphoid cells in the dermis (Figure 1D). Follicular arrangements were noted, and follicular center cells included centroblasts and tingible body macrophages (Figure 1D,E). Immunohistopathological findings showed that CD20+ and CD79a+ B cells infiltrated, and CD3+ and CD5+ T cells were interposed. The follicular center cells were CD10+ and bcl-2- cells, and Ki-67 labeling index was high. CD68+ cells were also scattered. We diagnosed the lesion as pseudolymphoma on the basis of histological and immunohistological findings. Topical tacrolimus for 3 months was ineffective. Indometacin and minocycline were stopped because of adverse effects: drug eruption to the former and lip pigmentation by the latter. Subsequently, the patient received topical corticosteroids (0.1% diflucortolone valerate) and



**FIGURE 1** A, Infiltrative erythematous lesions on right lateral eyelid of his initial visit. B, Exacerbation 2 y after the initial visit. C, Improvement 11 mo after etretinate administration. D, Histopathological findings (Hematoxylineosin stained specimen; original magnification: A, ×100; B, ×200): Dense infiltrate of lymphoid cells with follicular arrangements in the dermis. E, Follicular center cells including atypical lymphocytes and tingible body macrophages

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narrow-band ultraviolet B for 9 months (total 13.09 J/cm<sup>2</sup>). Despite those therapies, the lesions were enlarged and became more indurative (Figure 1B). Systemic corticosteroid was rather contraindicated because of the presence of diabetes mellitus as HbA1c was more than 8.0%. Etretinate, 40 mg/d, was started 2 years after the initial visit. The cutaneous lesions improved, and mild exacerbation observed when etretinate was reduced to 30 mg/d. Most lesions cleared by 11 months after the initiation of etretinate (Figure 1C), and exacerbation was currently prevented by etretinate 10 mg/d for 3 months.

Etretinate, a vitamin A derivative, has been used as an adjunctive agent for cutaneous T-cell lymphoma (CTCL) as the combination therapy with psoralen-ultraviolet A or/and interferons.<sup>1–4</sup> Although the exact mechanism underlying the therapeutic action of retinoids in CTCL remains unclear, it may boost immune functions by anti-tumor response and may induce apoptosis of malignant T cells. We diagnosed this case as pseudolymphoma on the basis of histopathological findings, in particular, tingible body macrophages and phenotype of infiltrating cells. Spontaneous remission cannot be ruled out in this case, but recurrence after etretinate dose reduction suggests its therapeutic value for our pseudolymphoma. Although pseudolymphoma does not have a guarded prognosis, it is not rare to have a difficulty in its treatment. Etretinate may have a potential as a therapeutic option for pseudolymphoma revealing resistance to other treatments.

#### ACKNOWLEDGMENT

We gratefully acknowledge the help of Prof. Howard I. Maibach,  $\ensuremath{\mathsf{M.D.}}$ 

#### CONFLICT OF INTEREST

The authors declare no conflict of interest.

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#### REFERENCES

- Fujimura T, Aiba S, Yoshino Y, Kuroki S, Kimura Y, Kikuchi K, et al. CCR1 Expression by atypical T cells in systemic pilotropic lymphoma: its behavior under treatment with interferon gamma, topical PUVA and systemic retinoid. Dermatology. 2004;208:221–6.
- Yamada Y, Oka M, Fujiwara S, Nishioka E, Okamoto Y, Hayashibe K, et al. Complete clinical remission of tumor-stage granulomatous mycosis fungoides after treatment with PUVA, skin electron irradiation, oral etretinate and systemic interferon-gamma. Int J Dermatol. 2013;52:893–5.
- 3. Burg G, Dummer R. Historical perspective on the use of retinoids in cutaneous T-cell lymphoma (CTCL). Clin Lymphoma. 2000;1(Suppl 1):S41–4.
- Zhang C, Duvic M. Retinoids: therapeutic applications and mechanisms of action in cutaneous T-cell lymphoma. Dermatol Ther. 2003;16:322–30.