

## Systemic isotretinoin in the treatment of a Behçet's patient with arthritic symptoms and acne lesions

Sirs,

Retinoids have an important and expanding role as therapeutic agents (1). A 21-year-old man suffering from Behçet's disease for three years, including arthritis, presented with nodulocystic acne on the face, trunk, back and upper extremities (Fig. 1). He had initially presented with panuveitis, arthritis, and recurrent aphthous ulcerations and had been using cyclosporine for panuveitis. He was prescribed colchicine and topical acne treatment. The oral aphthae responded well to our treatment, except for acne and arthritis. One year later we stopped all other treatment, including colchicine. We prescribed isotretinoin for 6 months at a dosage set to reach the standard cumulative dose of 120 mg/kg (1). After 40 days papules, pustules and nodules decreased dramatically. At the end of 6 months there were no lesions. Treatment was well tolerated by the patient, with mild cheilitis as the principal side effect. There were no systemic side effects. In the first 2 months of the treatment, he had an arthritic attack only once. It was treated with anti-inflammatory agents. Improvement of arthritis symptoms accompanied the decreasing acne lesions. During the treatment with retinoids, he had aphthae which were successfully treated with topical agents. The recurrence intervals of his mouth ulcers remained unchanged. He has now been followed up for one year after the retinoid treatment and uses only topical agents for aphthae, and still does not com-

plaint of arthritis.

The immunopathogenesis of Behçet's disease is believed to be cell-mediated. In Behçet's disease activated gamma-delta T cells capable of producing IFN-gamma and TNF-alpha are present in the peripheral blood, suggesting that gamma-delta T cells are dynamic and may be regulating immunopathogenic events (2). Vitamin A and retinoids are known to be potent immunoregulatory agents. Their ability to increase reactivity to histocompatible tissues is well documented but the mechanism of this action is unclear (3). The cell-mediated immune response can be regulated by isotretinoin (4). The papulopustular lesions (PPL) seen in Behçet's disease and acne vulgaris cannot be distinguished on the basis of clinical and histopathologic findings (5). However, the total mean number of PPL and the mean numbers located at the trunk, upper and lower extremities, and genitalia are higher in patients with Behçet's disease than in patients with acne vulgaris (6). In our patient there were no PPL on the lower extremities or genitalia and he had nodulocystic lesions on his face and trunk. Therefore he was diagnosed as having nodulocystic acne as a clinical manifestation of Behçet's disease and was treated with systemic isotretinoin. Although non-steroidal antiinflammatory drugs are of little value in the arthritis of Behçet's disease, colchicine and methotrexate are efficacious for arthritis (7). Colchicine had been ineffective for arthritis in our patient. We observed that the relief of his arthritic symptoms correlated with the improvement of acne lesions with isotretinoin treatment. This effect of isotretinoin may be due to its immunoregulatory properties, or to the possibility of his arthritis being a re-

active form associated with nodulocystic acne resulting from a *Propionibacterium acnes* infection.

Diri *et al.* (8) reported that certain types of acneiform skin lesions (papules and pustules) appear to be more frequent in Behçet patients with arthritis. We believe that isotretinoin may be used safely in Behçet's patients, especially when the dominant problems are nodulocystic acne and arthritis. However, the use of systemic isotretinoin should be formally studied in Behçet's disease with acneiform eruptions and arthritis. It should also be considered whether arthritis in some Behçet's patients is a basic symptom or a reactive arthritis resulting from acneiform lesions or folliculitis.

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**Fig 1.** Acne lesions in our patient.