Reiter's Disease: Successful Treatment of the Skin Manifestations with Oral Etretinate

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Cutaneous manifestations in a case of Reiter's disease were successfully treated by oral etretinate administration. The clinical and histopathological similarities between the skin lesions of Reiter's disease and those of pustular psoriasis, which is known to respond to aromatic retinoids, suggested this treatment. *Key words: Reiter's disease; Etretinate.* (Received January 30, 1984).

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Keratoderma blenorrhagicum and balanitis circinata are the most distinguishing skin manifestations of Reiter's disease, which classically consists of the triad of non-specific urethritis, non-suppurative polyarthritis and conjunctivitis. Less frequently psoriasis-like lesions can be observed over the buttocks, trunk, extremities and nails.

The management of Reiter's disease from the dermatologic viewpoint is quite often unrewarding. In the present report we describe a case of Reiter's disease, whose skin lesions were successfully treated with oral etretinate.

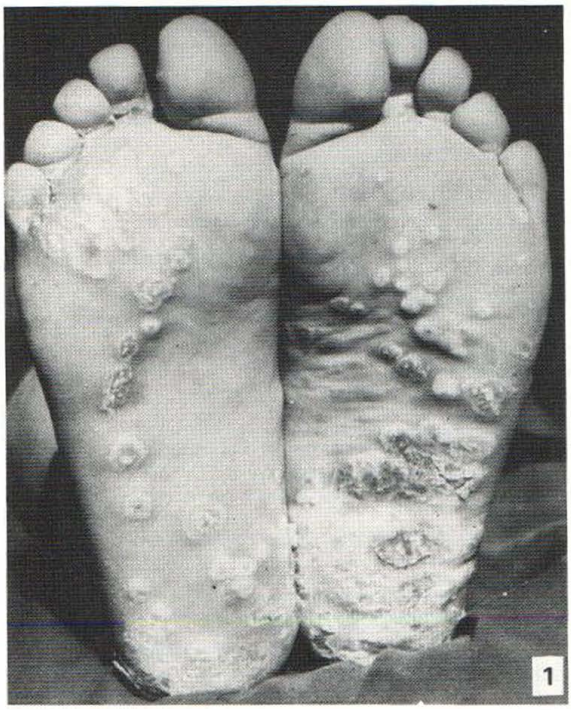
REPORT OF A CASE

A 54-year-old man was admitted on March, 1983, to Medical Division II of Parma Hospital for evaluation of long-standing pain and stiffness in several joints and a skin rash involving palms, soles and glans penis. In 1975 he presented at another hospital with fever, arthritis of his knees and wrists, hyperkeratotic lesions on soles and marked nail dystrophies. At that time a diagnosis of rheumatic fever was entertained and he was placed on antibiotics, corticosteroids and salycilates, with temporary improvement of his clinical state. Since then the patient experienced several relapses of his articular and cutaneous manifestations which became increasingly severe.

At the physical examination knees, wrists and feet were red, warm and swollen. Moreover fluctuation was felt at the knee joints. Abduction of the left shoulder was limited, the sacro-iliac joints were tender and a severe rigidity of the thoraco-lumbar spine was recorded. There was a mild bilateral conjunctivitis. Heavily heaped-up, cornified lesions and large pustules involved palms and soles (Fig. 1). Finger and toe nails were yellow and lifted-up at their distal margins by subungueal hyperkeratosis. Glans penis was affected by several, red, scaly macules coalescing into larger circinate patches.

Laboratory studies were normal, aside from an high sedimentation rate (1st h 98), fibrinogen 760 mg/dl, α_2 globulin (17%), and a mild normochromic anemia. Tests for syphilis, rheumatoid factor and antinuclear antibodies proved to be negative. HLA-B27 was positive. Chlamydia trachomatis cultures from urethra and conjunctivae were negative. RX evaluation revealed narrowing of the joint spaces in the right carpal bones, 3rd metacarpal phalanx of the left hand, knees and sacro-iliac joints. Bone cysts in the phalanges of the feet and fluffy periostitis of the Achilles tendon insertion was observed. Scintigraphy showed abnormal uptake of the radionuclide (99 Te^m-pertechnate) in the third left metacarpal joint and in the sacro-iliac joints. Greater uptake in the right carpal joint and in os calcanei was recorded.

Initial treatment with rolitetracycline (Reverin, Hoechst) 550 mg i.v./day and methylprednisolone (Urbason, Hoechst) 20 mg p.o./day was carried out for two weeks. Then oral doxicycline (Bassado, Poli) 100 mg/day and methylprednisolone 8 mg/day were given for two additional weeks. The patient was also placed on a non-steroidal, anti-inflammatory agent, diclofenac (Voltaren, Geigy) 100 mg/day for two months and then 50 mg/day up to day.



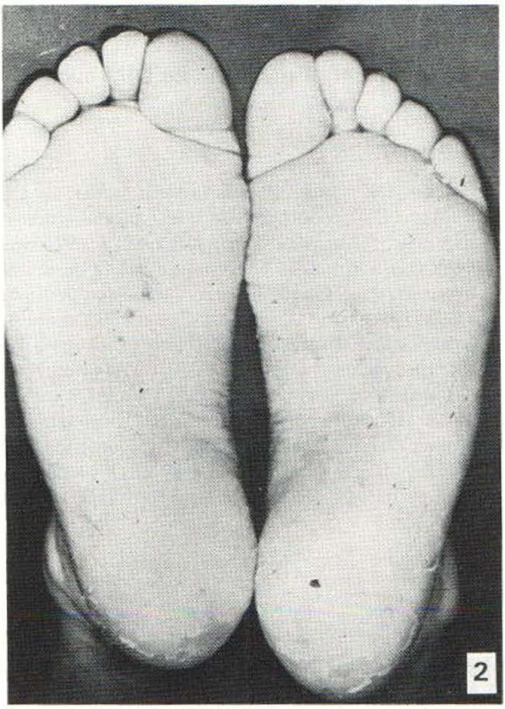


Fig. 1. Severe keratoderma blenorrhagicum of feet before treatment with oral etretinate. Note pustular lesions and hyperkeratosis.

Fig. 2. Clinical picture after 3 weeks of therapy with oral etretinate. Only few vesicles and a mild exfoliation are present.

The skin lesions were treated with keratolytic agents and topical corticosteroids under occlusive dressings. Since one month later the cutaneous and joint manifestations did not improve, a trial with oral etretinate was considered. After informed consent was obtained, oral etretinate (Tigason, Roche) 0.8 mg/kg/day in two fractions after meals was given. Within 3 weeks a considerable clearing of the skin lesions was observed (Fig. 2). The treatment schedule was decreased to 0.5 mg/kg/day for 1 month. With a long-term maintenance dose of etretinate, 0.5 mg/kg every other day, no relapse has been observed after a follow-up period of 6 months.

DISCUSSION

Oral retinoids should be considered a significant breakthrough in the treatment of several keratinizing skin diseases. Many studies stressed the efficacy of etretinate in the management of psoriasis vulgaris and its clinical variants, including pustular psoriasis (1, 2, 3). The clinical and histopathological similarities between the cutaneous manifestations of Reiter's disease and those of pustular psoriasis provided the rational for testing etretinate in the treatment of Reiter's disease. According to previous authors (4, 5, 6), who similarly claimed good results, our patient showed rapid and substantial clearing of his skin lesions. Moreover, the long-term administration of oral etretinate at low dosage seems capable to prevent clinical relapses. In our case the etretinate-induced joint improvement allowed the patient to reduce the amount of the non-steroidal anti-inflammatory drug, as reported by Stollenwerk et al. (7) in psoriatic artropathy.

Since the conventional topical and systemic therapy are not usually associated with significant clinical improvements, we suggest to consider oral etretinate as a valuable drug in the treatment of the skin and joint manifestations of Reiter's disease.

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