

Sarcoid-like Granulomatous Periocular Dermatitis Treated with Tetracycline

EDVARD S. FALK

Department of Dermatology, University Hospital, 9012 Tromsø, Norway

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Two cases of periocular micropapular dermatitis with sarcoid-like granulomatous histology are reported. After 8-12 weeks treatment with tetracycline the cutaneous eruptions of both patients cleared. The condition is equivalent to perioral dermatitis. *Key words: Sarcoid-like; Granuloma; Periocular; Dermatitis; Tetracycline.* (Received September 17, 1984.)

Edvard S. Falk, Department of Dermatology, University Hospital, 9012 Tromsø, Norway.

Perioral dermatitis is a relatively common disease, which occasionally may involve the chin, the cheeks, the forehead and the periocular area (1, 2, 3, 4, 5). The disease may be caused by some agent specifically absorbed by the follicle (6). Usually the lesions consist of small papules, vesicles or pustules associated with diffuse erythema and scaling and with non-specific mild inflammatory histopathological changes. However, a few cases with lesions of sarcoid-like histology have been reported (1, 3, 7).

We followed two cases of periocular dermatitis characterized by granulomatous histology.

Case 1

A 41-year-old woodwork teacher was referred with a 6-week history of periocular and paranasal papules associated with erythema. In the course of a few weeks the lesions spread to the forehead, chin and the perioral area. He noticed that after sawing wallboards which contain formaldehyde, the eruption flared up. Otherwise there was nothing relevant in the past or family history. Prior to hospital admission he had been treated by his general practitioner with prednisone 30 mg daily, gradually reduced to a maintenance level of 10 mg daily, which improved the eruption.

On examination there were numerous shiny yellowish to faint-red papules surrounded by marked erythema in the periocular and paranasal area.

Routine laboratory tests were negative. Bone- and chest X-rays were negative and the tuberculin reaction positive. Acid-fast bacilli were absent. Antinuclear antibody (ANA), Latex and Waaler test and investigations on different serum antibodies were negative. Direct and indirect IF investigations of skin biopsies were negative. Prick tests on a battery of allergens were negative, whereas patch tests with standard substances showed a positive reaction to formaldehyde. Several biopsies taken in the following weeks showed the picture of a tuberculoid granuloma.

He was given 2 daily doses of 500 mg oxytetracycline for 4 weeks, then 2 daily doses of 250 mg for the next 8 weeks. The eruption has progressed through various stages from an initial papular phase to the development of numerous large milia-like lesions. However, after 12 weeks of tetracycline treatment all lesions have flattened and pigmented macules are merely seen.



Fig. 1. Periocular lesions of sarcoid-like granulomatous dermatitis before treatment.

Case 2

A 31-year-old woman working as kitchen hand presented in November 1983 with a 4-month history of periocular dermatitis. She had a history of light sensitivity, but routine patch test as well as photo- and photo-patch tests were negative. On examination there were numerous faint-red papules with slight erythema in the periocular areas (Fig. 1). Various general investigations gave normal findings. Chest X-ray, FBC, ESR, serum electrophoresis, serum immunoglobulins, ANA, RF (Rose-Waaler and Latex test). Tuberculin reaction was positive. Acid-fast bacilli were absent.

A biopsy taken in January 1984 showed non-caseating epithelioid cell granulomata in the dermis with lymphocytes and histiocytes localized perivascularly and perifollicularly (Fig. 2). The appearance suggested sarcoidosis, but rosacea, lupus miliaris faciei and lupus vulgaris had to be taken into consideration.

Treatment with 2 daily doses of 500 mg oxytetracycline for 4 weeks, reduced to 2 daily doses of 250 mg for the next 4 weeks, cleared the eruption completely (Fig. 3).



Fig. 2. Granuloma with epithelioid cells and lymphocytes. $\times 90$.



Fig. 3. The same patient as in Fig. 1 seven weeks after treatment was completed.

DISCUSSION

Usually it is easy to make a clinical diagnosis of perioral or periocular dermatitis, although it is not possible in most cases to ascertain the etiology of the condition. However, it is considered that this type of dermatitis is mainly due to topical (allergic or toxic) agents. Burks (8) observed a case of granulomatous lesions on the eyelids with a sarcoid-like histology attributed to cosmetic preparation applied to the eyelids. Marks & Black (9) considered that perioral dermatitis was a type of follicular eczema. In one of our patients (case 1) the eruption flared up by exposure to, and improved after elimination of contact with formaldehyde. Thus, formaldehyde could be the provoking agent. However, the evidence for an association with the man's sawing of wood and of formaldehyde patch test is purely circumstantial. One would have to carry out a specific exposure test to prove the relationship.

Important problems from both clinical and histological aspects may arise in such patients, as it may be difficult histologically to distinguish between acne vulgaris, lupus vulgaris, granuloma annulare, acne rosacea and sarcoidosis. Although many of such cases are classified under tuberculides, they are not at all associated with tuberculosis.

The excellent response to low dose tetracycline treatment indicates that these cases are variants of perioral dermatitis. A therapeutical trial with tetracycline seems to be helpful in such cases.

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