Subacute cutaneous lupus erythematosus-like eruption from Tegafur

**Michiaki Ueda, Jinro Komura,* Toshiaki Higashida,
Shozo Futamura, and Yasuo Asada**

Department of Dermatology, Kansai Medical University,
Moriguchi, Osaka 570, Japan

*Department of Dermatology, Kitano Hospital,
Osaka, Japan

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Summary

A female patient who developed subacute cutaneous lupus erythematosus-like eruption after taking Tegafur is reported. The patient had a history of LE cell phenomenon and antinuclear antibody, and anti RNP and anti ss-DNA antibodies were positive at the time of skin reaction.

Introduction

Tegafur is one of 5-fluorouracil prodrugs that was synthesized in the Soviet Union and is used against adenocarcinomas with rather mild myelotoxicity¹⁾. We experienced a patient who had a history of positive LE cell phenomenon and antinuclear antibody, underwent hysterectomy, received Tegafur and developed skin eruptions.

Case Report

A 60-year-old woman with erythematous skin lesions on the face, palms and soles was first seen on February 5, 1985. According to the patient, ten years earlier she was pointed out to have hypertension, positive LE cell phenomenon and positive anti DNA antibody (160×). She had received no treatment, and skin lesions were not noticed. Her family history was not contributory. In September 1984, she underwent total hysterectomy because of uterus cancer. After the operation, 4500 rad cobalt was irradiated, and on December 4 she started to take Tegafur 600mg per day. About one month later she noticed skin lesions on the face, palms and soles. Also she notices mild tenderness and pain in the ankle. On the first examination, she was afebrile and had no remarkable complaints other than skin. There were well defined, edematous, dark red patches on the forehead, on the dorsa of nose and between the nose and

upper lip (**Fig. 1**), papuloerythematous lesions on the cheeks, erythema multiforme-like lesions on the palms and edematous erythemas on the soles. Nail changes and lesions in the oral cavity were not seen.

Laboratory studies. Complete blood cell count, total protein, urinalysis, serum compliment levels, immunoglobulins, chest X-ray and EKG were within normal limits. Test for rheumatoid factor was positive. The antinuclear antibody test was positive to a titer of 1 : 320 with a speckled pattern. The anti RNP antibody titer was positive up to 1 : 10240, while that of anti Sm was less than 40. SS-A, SS-B and Scl 70 antibodies were negative. DNA test was positive at titer of 1 : 640, but only anti ss-DNA IgG and IgM antibodies were positive at 100u/ml or greater and 30u/ml, respectively. Anti ds-DNA IgG and IgM antibodies were negative. Anti histone antibody was not examined.

Histology (Fig. 2). Biopsy specimen was taken from the forehead. The epidermis was atrophic with marked basal cell liquefaction degeneration. Many colloid bodies were noticed. Lymphocyte was not infiltrating into the epidermis. In the dermis round cell infiltration was noticed around blood vessels and hair follicles.

Course. Patient was hospitalized and predonisolone 600mg per day was prescribed reducing gradually. Tegafur was discontinued, and skin lesions disappeared in about two weeks. However, Tegafur was restarted on May 14 at 600mg per day, and the skin lesions reappeared as before on June 9 on the face, palm and soles. Patient was again hospitalized and treated with predonisolone. In November, patient received Tegafur 600mg per day to see whether the

Fig. 1 Well defined, dark red patches on the forehead, on the dorsa of nose and between the nose and upper lip.

Fig. 2 The epidermis is atrophic with marked basal cell liquefaction degeneration and colloid bodies. In the dermis round cell infiltration is noticed.

skin lesions would be provoked. 17 days later she developed arthralgia of the left ankle and tenderness in the soles causing difficulty in walking, and she was again hospitalized. No skin lesions were noticed at that time.

Discussion

Adverse cutaneous reaction to Tegafur has been reported mainly in the Japanese literature²⁾. It includes erythema, bulla, hyperkeratosis, pigmentation, nail changes, erosio in the oral cavity and genitalia, and photosensitivity. More recently, discoid lupus lupus erythematosus-like lesions have been noted³⁾. In DLE-like lesions, besides histology with atrophy of the epidermis and liquefaction degeneration of the basal layer, patients showed leukopenia, and positive antinuclear and DNA antibodies. In the present patient, the clinical feature of the face was that of papulosquamous pattern of subacute cutaneous lupus erythematosus, and the development of skin lesions was closely related to the intake of Tegafur. Compared with spontaneous SLE, features of drug-induced LE include milder symptoms which improve on cessation of drugs, presence of arthralgia and myalgias, positive antihistone antibody and negative DNA antibody, rarely positive lupus band test, and rare kidney and central nervous system involvement^{4, 5)}.

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