A Case of Dermatomyositis Triggered by Tegafur

Sir.

Tegafur, a derivative of 5-fluorouracil, has been widely used for the chemical treatment of cancers of the gastrointestinal tract. Although tegafur is well known to cause a variety of drug eruptions (1), the induction of dermatomyositis has not been reported to our knowledge. We here report a case of dermatomyositis triggered by tegafur.

CASE REPORT

A 55-year-old Japanese female was treated with a suppository of tegafur after colostomy and hepatectomy for cecum adenocarcinoma with liver metastasis. Ten days after the initiation of tegafur, an itchy, edematous, scaly erythema occurred on her face, neck, back, arms, and legs. The extensor surface of the proximal interphalangeal joints and the dorsa of hands had keratotic erythematous changes, typical of Gottron's sign. There were many vesicles scattered on the erythema of the arms. As we suspected that this cutaneous disorder had been caused by tegafur, we stopped the drug and the eruptions rapidly improved, but some parts did not completely disappear. They gradually increased in number and size on the trunk over a period of 1 month. Additionally, purplish plaques arose, with slight edema on the upper eyelids and cheeks. Proximal muscle pain and weakness also occurred on the extremities and were accompanied with general fatigue. The biopsied skin from the right forearm histologically showed liquefaction degeneration, moderate lymphocytic exocytosis and perivascular lymphocytic infiltration in the upper dermis. Direct immunofluorescence test was negative. The biopsied muscle from the right upper arm showed mild infiltration of lymphocytes between muscle fibers. Laboratory examination showed the abnormally high values of GOT 61 U/l, GPT 32 U/l, LDH 1092 U/l, aldolase 4.7 mU/ml and CPK 276 U/l. A myogenic pattern was detected by the electromyogram.

The systemic administration of prednisolone 30 mg/day quickly improved the skin lesions, muscle weakness and general fatigue within 1 week. However, the patient died 10 months after she visited our hospital, as liver metastasis gradually increased to accelerate severe ascites.

DISCUSSION

Tegafur causes a variety of dermatologic reactions in 15 to 20% of patients. The reactions include lichenoid eruption,

photosensitive dermatitis, pigmented macules of palms, soles, nails and oral mucosa (1). As regards collagen diseases, tegafur can induce SLE and widespread DLE (2). However, tegafurcaused dermatomyositis has not been reported to our knowledge.

Taking into account that the association of dermatomyositis and internal malignancy is not uncommon (3), one may argue that the manifestation of dermatomyositis is related to the metastatic cecum adenocarcinoma in the present case. However, in view of the following three points, we assumed that this dermatomyositis was triggered by tegafur. Firstly, the onset of dermatomyositis was 10 days after the initiation of tegafur. Secondly, the histologic findings disclosed a lichenoid tissue reaction, which is frequently observed in tegafur-induced drug eruption. Thirdly, the cessation of tegafur resulted in marked improvement of the skin lesions. These findings allow us to speculate that tegafur is one of the causative drugs of dermatomyositis.

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