Exfoliative Dermatitis After Clofazimine

TO THE EDITOR:

Clofazimine is widely used in the treatment of leprosy and offers the best hope against resistance to dapsone. Since it is a phenazine dye, it gradually stains all the tissues of the body a characteristic red-brown color. Various other side effects reported include dryness and ichthyosis ([1, 2]), corneal changes ([5, 7]), eosinophilic enteritis ([4]), and other types of gastrointestinal lesions ([3, 6]). Recently, we have seen a case of lepromatous leprosy who developed severe exfoliative dermatitis following clofazimine (Shurid Geigy: Hansenpran) therapy.

A 54-year-old police officer was seen in the dermatology section of the Medical College Hospital, Kottayam, India, in January 1985 for generalized exfoliative dermatitis and multiple nodules and plaques on the trunk, limbs, and face. A history revealed that the patient had had numbness of the extremities and multiple cutaneous nodules and plaques for 6 months. He consulted a dermatologist at Trivandrum, and a diagnosis of Hansen's disease was made. He had received dapsone 100 mg and rifampin 600 mg daily for 6 weeks. Then he was asked to take clofazimine 100 mg on alternate days in addition to dapsone and rifampin. On the eighth day of clofazimine therapy, the patient developed generalized itching, erythema, and scaling. He stopped taking all of the medicines for 2 weeks and then attended our hospital. There was no history suggestive of psoriasis or seborrheic dermatitis in the past.

Examination revealed diffuse infiltration of the face and ears and multiple, bilateral, ill-defined nodules and plaques on the trunk and limbs. The skin all over his body, including that over the plaques and nodules, showed erythema and scaling resulting in exfoliative dermatitis. The left lateral popliteal, right ulnar, and both great auricular nerves were thickened but not tender. There was "glove and stocking" type of anesthesia of all four limbs. The patient was afebrile and systemic examination did not reveal any abnormality. While in the ward all antileprosy drugs were stopped. He was given oral pheniramine maleate and erythromycin, and liquid paraffin was applied topically after bathing. Routine laboratory tests on urine, blood, and stool were found to be normal. The erythrocyte sedimentation rate (ESR) was only 11 mm/1st hour Westegren. Total serum protein, albumin globulin ratio, SGOT, SGPT, and serum bilirubin were all normal. Tissue smears from the earlobes and plaques showed acid-fast bacilli with a BI of 6+ and a MI of 20%. A biopsy of a skin nodule showed the typical histological features of lepromatous leprosy. The epidermis showed focal parakeratosis, acanthosis, and spongiosis. After 2 weeks, the scaling and erythema subsided but the nodules and plaques persisted.

Dapsone was restarted in a dose of 100 mg daily for 5 days without any adverse reaction. He was then given dapsone 100 mg and rifampin 600 mg daily for 7 days. There was no itching or erythema of the skin. Lastly, he was given clofazimine 100 mg orally. Twelve hours after clofazimine intake the patient experienced severe generalized pruritus, and after 24 hr there was also generalized scaling of the skin, resulting in exfoliative dermatitis. Clofazimine was withdrawn from the regime, and he was given injections of pheniramine maleate. Topical steroid ointment and liquid paraffin were applied on the skin daily after bathing. The exfoliative dermatitis subsided after 2 weeks. The patient was later treated with dapsone 100 mg and ethionamide 375 mg daily and rifampin 600 mg once monthly. Two-months' follow-up did not show any recurrence of the exfoliative dermatitis. The nodules and plaques are regressing, and the present BI is 5+ and the MI, 0%.

Even though various side effects ([1–7]) have been reported after clofazimine therapy, exfoliative dermatitis following its administration, to the best of our knowledge, so far has not been reported. Hypersensitivity is the most probable mechanism of exfoliative dermatitis in our patient because even a small dose of clofazimine (100 mg) could reproduce the dermatitis, and itching was the predominant symptom. Withdrawal of the drug caused prompt recovery, and reintroduction of the drug produced a recurrence of the exfoliative dermatitis. It is in-

teresting to note that, in spite of possessing profound anti-inflammatory action, clofazimine produced a severe inflammatory type of dermatitis—exfoliative dermatitis—in the present case.

—K. Pavithran, M.B., B.S., M.D., D.V.D.

Assistant Professor
Department of Dermato-Venereology
Medical College Hospital
Kottayam 686008, India

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