Thalidomide Therapy on A Case of Prurigo Nodularis

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Prurigo nodularis is a troublesome chronic dermatosis that showed unsatisfactory response to conventional therapies. Since thalidomide has been applied to the treatment of prurigo nodularis, although the action mechanism is still uncertain, many dermatologists have confirmed its effectiveness.

We treated a 54-year-old male patient who had prurigo nodularis affecting the whole body for 10 years with 100 to 300mg of thalidomide daily as the sole therapy for 4 months. The skin lesions were flattened leaving postinflammatory hyperpigmentation and the pruritus also subsided. Two years after stopping thalidomide, no recurrence was observed.

(Key Words: Prurigo nodularis, Thalidomide)

Prurigo nodularis is a benign chronic dermatosis that is often difficult to treat successfully. The causes of prurigo nodularis are unknown but some consider it as a variant of lichen simplex chronicus. Although many therapeutic modalities such as intralional corticosteroid, benoxaprofen, PUVA and cryotherapy have been used, the results were not satisfactory and frequent relapses were common. Since Mattos reported the successful treatment of prurigo nodularis with thalidomide in 1973, the effectiveness has been confirmed by several authors. Therefore, we decided to administer this medication to our patient who had been suffering from prurigo nodularis, which resisted various kinds of treatment for 10 years.

REPORT OF A CASE

A 54-year-old male patient was first seen at our hospital with a 10-year history of pruritic nodular skin lesions. The skin lesions had appeared on the lower back initially and gradually spread to become generalized. Prior to visiting our hospital, he received a number of treatments including intralional injection of triamcinolone, occlusive dressing therapy with potent corticosteroids, sedatives and cryotherapy which only had a temporary effect on the pruritus and the skin lesions. The patient was hospitalized for further evaluation and treatment. His physical examination disclosed no abnormal findings except for the numerous pea to bean sized, elevated, reddish to dark brownish, somewhat scaly, excoriated firm nodules on the trunk and extremities (Fig. 1.). At admission, complete blood cell count, urinalysis, renal and liver function tests were within normal limits. IgE PRIST level was slightly elevated up to 448 IU/ml (normal, below 250 IU/ml). To appraise his immunologic status, multitest CMI, peripheral T cell and B cell counts and T4/T8 level were checked and the results were all within normal limits. We also performed mental status examinations and MMPI which revealed no abnormalities. A Skin biopsy from a nodule on the lower leg showed marked hyperkeratosis, acanthosis, papillomatosis of the epidermis as well as perivascular inflammatory infiltrates in the upper parts of the dermis (Fig. 3.). The changes were considered consistent with prurigo nodularis. After we diagnosed it as prurigo nodularis clinically and histopathological-
ly, administration of thalidomide at a dose of 100 mg twice daily was begun. During the thalidomide therapy, all topical and systemic medications were stopped. On the 7th day of therapy, the dosage was increased to 300 mg per day and some of the skin lesions became erythematous and edematous, and some even started to ooze. By the 12th day, most of the skin lesions showed oozing and some were flattened with crust formation. At that time, we performed an immunoperoxidase stain of the oozing lesion which showed a strong positive reaction to UCHL 1 (pan-T cell marker) (Fig. 4). By

**Fig. 1.** Before treatment: Numerous pea to bean sized, excoriated, firm nodules on the lower back (Lt) and upper arm (Rt).

**Fig. 2.** One hundred twentieth day after stopping thalidomide: Completely flattened nodules leaving postinflammatoty hyperpigmentations.