

gastrointestinal bleeding) the skin manifestations being hemorrhagic and necrotic areas. On being consulted concerning our patient, the above mentioned author stated that he had never seen lesions similar to those in our case although he considered them to be due to the same pathogeny (11).

We suggest that the pattern presented by this patient could be considered as a mild form of capillary leak syndrome, not previously described.

In view of the striking effect of Cyclosporin A on the skin manifestations and its very slight or lacking effect on blood count pattern, we consider that this drug would be more appropriate in the treatment of mycosis fungoides than of Sézary's syndrome.

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The Response of Generalized Granuloma annulare to Dapsone

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Czarnecki D B, Gin D. The response of generalized granuloma annulare to Dapsone. *Acta Derm Venereol (Stockh)* 1986; 66: 82-84.

Six patients with generalized granuloma annulare were successfully treated with Dapsone. Their ages ranged from 11 to 76. There were no serious side-effects and all were able to cease the drug. *Key words: Chronic disease: Anti-inflammatory; Safe.* (Received May 20, 1985.)

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Table I. *The response of generalized granuloma annulare to Dapsone*

Case no.	Sex Age	Distribution	Duration	Other diseases	Response	Follow-up
1	F, 48	Upper back, upper arms	1 year	Hypertension	Cleared in 4 weeks. Flared next summer (off Dapsone). Cleared again in 4 weeks	Clear 19 months later. Off Dapsone
2	M, 19	Upper back, upper arms	4 weeks	Nil	Cleared in 4 weeks	Clear 20 months later. Off Dapsone
3	M, 11	Trunk, upper limbs, thighs	4 weeks	Nil	Cleared in 3 months. Flared next summer (off Dapsone). Cleared again in 3 months	Clear 3 months later. Off Dapsone
4	F, 67	Neck, upper limbs, behind knees	5 months	Diabetes	Cleared in 8 weeks	Clear 6 months later. Off Dapsone
5	F, 38	Ankles, knees, thighs, wrists, elbows	7 years	Nil	Cleared in 8 weeks	Clear after 4 months. Off Dapsone
6	M, 76	Neck, upper limbs	2 years	Diabetes, hypertension	Cleared in 8 weeks	Currently Dapsone being reduced

Generalized granuloma annulare (GA) is an uncommon disease, which has a prolonged course and is usually difficult to treat. Many agents have been tried but few have been successful. Dapsone has been successfully used to treat this disease, yet it is not recommended as an initial form of treatment (1). We have used dapsone to clear six patients with generalized granuloma annulare.

OBSERVATIONS

A summary of the case histories is set out in Table I. The longest time taken to clear the skin was in case 3 because the dose of dapsone was slowly increased due to the patient's youth. The dapsone was well tolerated by all except case 3 who developed fatigue when taking 100 mg a day. A dose of 50 mg a day was well tolerated. The GA relapsed in cases 1 and 3 during the first summer they were not taking dapsone. Both cleared when the drug was recommended and they remained free after the drug was ceased.

DISCUSSION

These case histories demonstrate that dapsone is very effective for treating generalized GA. It works for a wide age range, if the lesions are annular or papular, if they are asymptomatic or pruritic and if diabetes is present or absent. It is unlikely that these results were due to spontaneous remissions because new lesions were evolving in four patients when dapsone was started yet they cleared within a short time of the start of treatment. Two patients had a recurrence after they ceased treatment but recommencement lead to a quick resolution. The dose must be adjusted according to the clinical response but 100 mg a day appeared to be the optimum dose.

Dapsone is relatively safe (2). It has been used by millions of patients for the treatment of leprosy, and in such diseases as dermatitis herpetiformis, cystic acne, relapsing poly-chondritis and vasculitis which have a marked inflammatory component (3). Dapsone suppresses inflammation and this may be how it acts in GA where there is evidence that cell-mediated immunity is involved in its pathogenesis (4).

Many other agents have been used with varying results. The most successful have been the alkylating agents Chlorambucil and Melphalan. Several patients have been treated and have responded (5). However, these agents are best reserved for patients with disabling diseases and who have not responded to other treatments because of possible side-effects.

Other agents have not been a success. Systemic glucocorticosteroids (6) have cleared the lesions but they returned quickly, when treatment was stopped. Chlorpromamide and carbohydrate restriction have not been beneficial (7). Potassium iodide was used in four patients with some improvement but none of them cleared even after twelve weeks of therapy (8). Niacinamide had to be taken for eight months before one patient cleared but the lesions returned when the drug was stopped (9). Claims for improvements with bismuth (10) or antimalarials (11) have not been confirmed (10). Gold injections (12) and antihistamines (10) have not influenced the course of the disease and X-ray therapy has had no effect or produced only temporary improvement (13).

These cases demonstrate that, if treatment is indicated for generalized GA, dapsone should be considered before other agents.

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Psoriasis Treatment with Betamethasone Dipropionate Using Short-Term Application and Short-Term Occlusion

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Jæger L. Psoriasis treatment with betamethasone dipropionate using short-term application and short-term occlusion. *Acta Derm Venereol (Stockh)* 1986; 66: 84-87.

High rates of penetration and of transepidermal water loss in psoriatic lesions allow reduction in the periods of application and occlusion, respectively, in corticoid treatment.