

Low-dose Dapsone in Chronic Idiopathic Urticaria: Preliminary Results of an Open Study

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Sir,

Chronic idiopathic urticaria (CIU) is defined as the occurrence of wheals on most days for more than 6 weeks in the absence of any known causative or triggering agents (1). Most cases of chronic urticaria are classified as 'idiopathic', despite intense efforts to determine any aetiological factor, and require long-term treatment with H₁-receptor antagonists, which are the first-line approach to uncomplicated forms (2). Here we present our cumulative experience with dapsone in some cases of severe refractory CIU.

MATERIALS AND METHODS

The effect of dapsone was evaluated in adult patients with severe relapsing CIU enrolled over a 5-year period. History,

clinical examination and specific investigations failed to disclose any causal or relevant triggering factor.

Before starting therapy with dapsone, patients underwent the following laboratory assessment: full blood cell count (including differential white blood cell count, platelet and reticulocyte count), liver and renal function tests, urinalysis and glucose 6-phosphate dehydrogenase levels. Full blood cell count was repeated 2 weeks after initiation of therapy and then every 4–6 weeks.

All patients received dapsone 25 mg/day in combination with a standardized H₁-blocker (cetirizine 10 mg/day). Patients were instructed to withdraw cetirizine when a satisfactory control of symptoms was achieved, whereas treatment with dapsone was stopped at least 4 weeks after the disappearance of symptoms. Patients were observed after 2 weeks, and then at monthly intervals. The response to treatment was assessed subjectively and recorded as complete (remission), partial (improvement) or poor (unchanged). In case of poor response

after 4 weeks, dapsone dosage was increased to 50 mg/day. Follow-up information, when unavailable, was obtained by telephone calls.

RESULTS

Eleven patients (7 women and 4 men), aged 27–68 years (mean age 44), with severe refractory CIU were enrolled after they had given their informed consent. Three of these subjects also had delayed pressure urticaria. All patients had been unresponsive to H₁-receptor antagonists.

A complete response after dapsone was obtained in nine patients within 3 months of treatment. These patients included the three subjects with delayed pressure urticaria, who had negative pressure tests. At follow-up evaluation of variable duration, no relapse occurred in seven patients. A patient with CIU relapsed after 2 years and again obtained a complete persisting response after a 3-month course with dapsone 25 mg/day.

The overall onset of response in these nine patients appeared to be gradual (median, 3–4 weeks). Most patients reported that cetirizine treatment was interrupted after about 4–6 weeks; two patients were able to withdraw antihistamine treatment after 2 months and only one patient after 2 weeks.

Two patients were unresponsive to treatment at 4 weeks; the increase of the daily dosage to 50 mg caused a complete response after 2 months in one case and a partial response in the other.

Treatment was well tolerated in each case; there were neither adverse events nor alterations of haematochemical parameters.

DISCUSSION

Dapsone (4-4'-diaminodiphenylsulfone) is a sulfone derivative which exerts antimicrobial and anti-inflammatory effects and has been used for more than 60 years to treat a great variety of skin diseases (3, 4). As for urticarias, dapsone, alone or in combination with other drugs, is considered an effective therapeutic approach to urticarial vasculitis (3–11), thanks to the inhibition of neutrophil functions.

Anecdotal reports suggested the feasibility of treatment with dapsone in CIU and delayed pressure urticaria, in which favourable results were obtained in isolated cases or small study populations (12–14). The mechanism of action of dapsone in CIU, as well as in other skin diseases, is not completely understood.

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