Dapsone in Lichen Planus

Sir,

No dermatosis seems easier to recognise and harder to cure than lichen planus (LP) (1). Dapsone 4–4' diamino diphenyl sulphone (DDS) was found to be effective not only in erosive oral LP as was initially reported (2, 3), but also in both cutaneous and mucosal LP (4). We have now extended our earlier observations and given oral dapsone 100 mg twice daily for 16 weeks in 92 adult patients with LP. Clinical expression of the disease ranged from a few lesions to widespread involvement. Duration of the disease ranged from 1 month to 7 years. Thirty-four patients had cutaneous LP alone; 18 had both cutaneous and mucosal LP, while oral LP alone was observed in 23 patients. Among 52 patients with cutaneous involvement, 40 had classical papules of LP, 5 hypertrophic lesions, 4 actinic and 3 follicular LP. Of the 75 patients who completed the study, 39 (52%) were males and 36 (48%) females. No other medication except a bland oil or cream for topical application was permitted. Dapsone was well tolerated by all except 3 patients. In 49 (65.3%) patients, complete healing with hyperpigmentation was observed within 16 weeks of the study period. In 14 (18.7%) pertial response was seen. There were 12 (16%) treatment failures with no response after 4 weeks. In patients with mucosal LP, the response started early and was seen more often, in 84%. Four patients relapsed after withdrawal of dapsone but responded quickly to reinstitution of therapy. Subsequently there was no relapse in a follow-up period of 1 year.

The exact mode of action of dapsone in a lymphocyte-rich dermatosis is not known. However, a mechanism similar to that proposed for a polymorphonuclear-rich dermatosis may be operating. It is possible that polymorphonuclear-oxygen intermediates (PMN-0I) play a role in selective lymphocyte killing. Dapsone has been shown to have a scavenger-like effect. By quenching oxygen intermediates, it possibly inhibits the enzyme, indoleamine dioxygenase which is responsible for the release of lymphokines and prostaglandins (5). Dapsone may also exert an anti-inflammatory effect by inhibiting the release of inflammatory or chemotactic factors from mast cells (6).

In view of its efficacy, larger and controlled trails may establish its role in the treatment of LP.

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