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LETTERS TO THE EDITOR

Combination Therapy Cyclosporin A—PUVA in Psoriasis

Sir,

Cyclosporin A (CsA) is effective against plaque-form psoriasis (1 for Ref.). However, CsA has serious side-effects (2), which limit CsA therapy in dermatology. In order to improve the risk–benefit ratio we tried a combination therapy consisting of psoralens and artificial ultraviolet A (PUVA) with CsA.

Four patients with chronic plaque-form psoriasis resistant to topical anti-psoriatics and partially responsive to PUVA or methotrexate were selected. Patients with any concomitant disease were excluded. Before initiating treatment (baseline) and during CsA therapy, haematologic parameters, serum electrolytes, liver enzymes, serum creatinine and blood pressure values were determined. Clinical evaluation of psoriasis was carried out using the psoriasis area and severity index (PASI) (3).

All patients received 5.0 mg/kg/day CsA (oral solution Sandimmun® 100 mg/ml) divided into two doses per day. In the case of side effects the CsA dose was reduced by 25%. When the PASI had declined to 25% from baseline or more, the CsA dose was reduced by 1.0 mg/kg/day every 4 weeks until an increase in PASI was observed. In the case of a relapse (PASI score above 50% from baseline), PUVA was added. For PUVA therapy we used the same protocol as the United States Cooperative Clinical Trial Study (4). When after 8 weeks of CsA therapy, PASI was still higer than 25% from baseline, we regarded CsA monotherapy ineffective and PUVA was added.

Table I. *CsA therapy*

Pat. no.	PASI at baseline	PASI <25%[a]	Minimal effective dose	Relapse[b]
1	23.3	8	3.0	24
2	31.1	6	3.0	20
3	19.4	Failure	—	
4	48.8	Failure	—	

[a] CsA treatment in weeks until PASI was less than 25% from baseline value. When after 8 weeks CsA therapy PASI was still above 25% from baseline, therapy was considered a failure.

[b] Numbers of weeks with CsA treatment until PASI exceeded 50% from baseline.

RESULTS AND DISCUSSION

The results are listed in Table I and II. All patients required a CsA dose higher than 3.0 mg/kg/day and no additive effect from PUVA to CsA therapy was observed. In patients 1, 2, and 3, psoriasis was exacerbated despite PUVA being added to CsA therapy. In patient no. 4, combination therapy CsA–PUVA was effective. In the latter, however, after discontinuing CsA therapy, psoriasis could be controlled with PUVA alone. Therefore it is likely that PUVA alone was responsible for the effect on psoriasis.

In patients treated with immunosuppressive drugs including CsA, a high incidence of cutaneous malignancies associated with sun exposure (5) has been reported. Since CsA is capable of promoting the sur-

Table II. *CsA – Puva combination therapy*

Pat. no.	PASI % before PUVA therapy[a]	Weeks CsA–PUVA	CsA dose	Side-effects	PASI % at end of baseline	Cumul. UVA dose (J/cm^2)
1	54	6	3.0	–	86	5.6
2	51	8	3.0	Creat. ↑	68	4.9
3	69	16	5.0/3.5[b]	Creat. ↑	89	208.1
4	47	6	5.0	–	0	93.0

[a] PASI in % from baseline value (Table I).

[b] Before/after dose reduction for side-effects.

vival and progression of UV-induced skin tumours (6) it is likely that the increased risk of cutaneous squamous cell carcinomas in PUVA therapy (7) is potentiated by CsA. Rapid growth of squamous cell carcinomas has been observed in patients treated with CsA for psoriasis (8). Therefore, the combination therapy CsA–PUVA should be avoided until a beneficial additive effect from PUVA in CsA therapy is proven.

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