

## Transient Hyperpigmentation after Calcipotriol Ointment and PUVA Therapy in Psoriatic Patients

Sir,

In 1995 Kokelj et al. (1) reported 3 patients who had developed hyperpigmentation after a combined treatment of calcipotriol ointment and heliotherapy. It seems interesting to communicate that we have also encountered secondary hyperpigmentation after a combined treatment with calcipotriol and PUVA. As far as we know, there are no reports of a similar side-effect in patients treated with calcipotriol ointment and exposed to ultraviolet A or B radiation.

We have observed 2 patients treated with calcipotriol ointment and PUVA for psoriasis vulgaris, who developed obvious hyperpigmentation around the psoriatic plaques. No other associated symptomatology was found and erythema, pruritus or irritation were not evident prior to the pigmentation. In both cases, calcipotriol ointment (50 mcg/g, Daivonex (r)) was used twice a day. The patients also applied calcipotriol on the morning of PUVA treatment. PUVA therapy was given 3 times weekly; oral 8-methoxypsoralen was given 0.6 mg/kg 2 h before UVA irradiation, and in both cases the initial UVA dosage was 2 J/cm, with an increment of 0.5 J/cm at each treatment.

The first patient was a 54-year-old man with phototype III, who had suffered psoriasis vulgaris for 8 years. Pigmentation was observed after 18 PUVA treatments. The cumulative UVA dose was 112 J/cm. Calcipotriol had then been applied for 50 days. The second patient was a 42-year-old man with phototype IV, who had suffered psoriasis vulgaris for 20 years. When the pigmentation was evident, he had received 11 PUVA treatments. The cumulative UVA dose was 48 J/cm. Calcipotriol was applied for 25 days. No other systemic or

biochemical abnormalities were detected in either of the patients and other secondary effects of 8-methoxypsoralen or UVA were not recorded. In both cases, the pigmentation subsided in less than 1 month after the treatment was stopped.

We think that, as in the cases described by Kokelj et al. (1), the pigmentation observed in our patients is probably secondary to the treatment and not a post-inflammatory hyperpigmentation since; 1) this pigmentation was present only around the calcipotriol-treated plaques; 2) both patients displayed some untreated plaques at the top of the back which did not show any obvious hyperpigmentation; 3) the patients had used both calcipotriol ointment and PUVA as single treatments without the presence of such hyperpigmentation; 4) neither of the patients had received any other systematic or topically applied drug and we found no other reasons that could explain the hyperpigmentation; and 5) as Kokelj et al. have pointed out, post-inflammatory hyperpigmentation is unusual after psoriasis.

### REFERENCE

1. Kokelj F, Lavaroni G, Perkan V, Plozzer C. Hyperpigmentation due to calcipotriol plus heliotherapy in psoriatic patients. *Acta Derm Venereol (Stockh)* 1995; 75: 307-309.

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