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Treatment of Alopecia areata with Diphenylcyclopropenone

For some time now diphenylcyclopropenone has been used in the treatment of alopecia areata with great success (1, 3). Based on our clinical experiences we now want to point out that in therapy-resistant cases the treatment should not be discontinued after 20 weeks as previously recommended (2). This suggestion is based upon the observation that during the course of treatment three of our patients showed beginning of hair growth as late as 6-8 months after treatment was started. A spontaneous remission in these cases does not seem probable since hair growth was confined to treated areas alone.

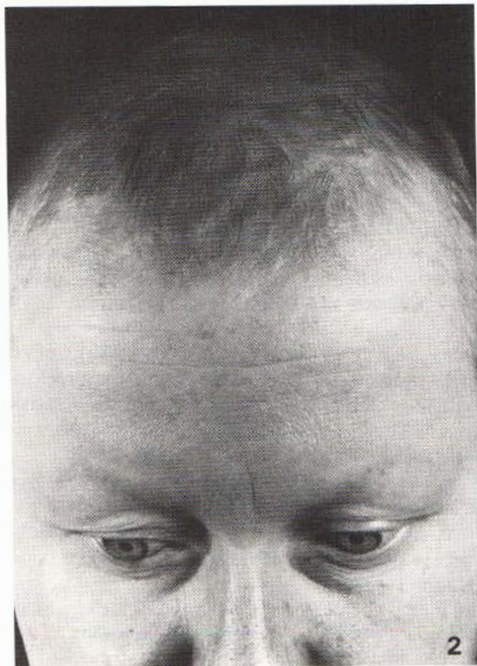
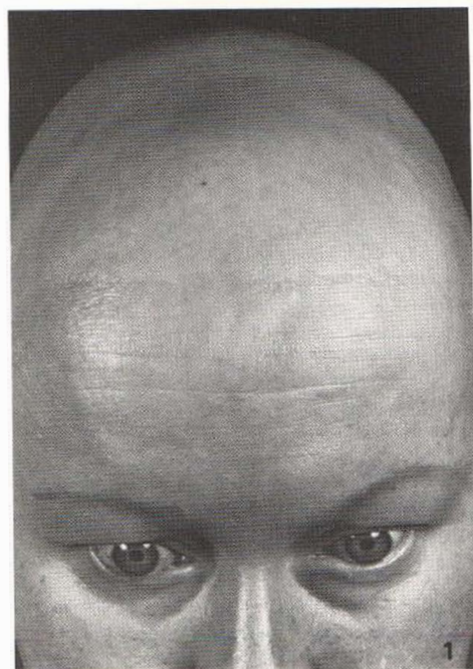
We also wish to point out an interesting phenomenon, for which we have no explanation so far. Three patients also showed regrowth of non-treated eyebrows and eyelashes 4-5 months after hair regrowth on the scalp (Figs. 1-3), whereas in other areas of the body, especially axilla and pubic region, alopecia persisted. Possibly a transport of the contact allergen to close skin regions led to a reaction with perifollicular sensitized T-lymphocytes, which might be essential for the initiation of hair regrowth (5).

After successful induction of a contact eczema and continuous treatment for several months two of our patients surprisingly lost their sensitivity towards diphenylcyclopropenone on the scalp and did not even respond to the application of high concentrations. However, they were very well able to develop a contact eczema on the arm after the application of a concentration as low as 0.01 %. This phenomenon may resemble so-called "hardening". Unfortunately in both these cases treatment had to be discontinued because there was no response.

It seems important to emphasize that diphenylcyclopropenone is a very potent contact allergen (4). Therefore in general it is not advisable to give it to patients for self-treatment. Improprate self-treatment may cause severe generalized eczema making the patients hospitalization necessary. In any case the treatment should be supervised by a doctor continually.

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Figs. 1-3. Treatment of alopecia areata with diphenylcyclopropenone.

Fig. 1. Alopecia universalis before treatment. Patient used eyebrow pencil.

Fig. 2. After 6 months of treatment beginning regrowth of hair on the scalp. Still no hair in other areas of the body including eyebrows and eye lashes.

Fig. 3. After 18 months of treatment complete regrowth of hair on the scalp. Also regrowth of untreated eyelashes and eyebrows, whereas in other areas of the body, especially axilla and pubic region, alopecia persisted.

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