# UVA1 Cold-Light Phototherapy of Small Plaque Parapsoriasis

*Sir*,

Parapsoriasis en plaques is a chronic, inflammatory skin disorder of unknown etiology. Parapsoriasis lesions are customarily divided into small (< 5 cm diameter) and large (>5 cm diameter) plaque types. Although small plaque parapsoriasis (SPP) is closely related to cutaneous T-cell lymphoma (CTCL) a progression to malignancy has not been described in SPP (1 – 3). Apart from topical corticosteroids the most well-established therapy regimens for parapsoriasis are PUVA and UVB therapy (4, 5). We report for the first time a patient with SPP treated with UVA1 cold-light (UVA1-cl) phototherapy.

## CASE REPORT

A 57-year-old Caucasian man presented with a 7-month history of scaly, erythematous skin eruptions. Treatment with topical fluocortolone did not control the spread of disease. Clinical examination revealed erythematous and slightly scaly confluent plaques on the trunk (Fig. 1). Histologic examination showed a mild superficial perivascular lymphocytic infiltrate associated with occasional spongiosis. The dermal infiltrate consisted predominantly of lymphocytes ($CD3^+$, $CD4^+$) and histiocytes.

Treatment was performed with a UVA1-cl source (CL 300.000 liquid; Photomed, Hamburg, Germany) emitting wavelengths of 340 – 530 nm only. Heat-producing infrared radiation was eliminated by means of an advanced filtering and cooling system. The UVA intensity was 32 mW/cm$^2$. Medium-dose UVA1-cl phototherapy was carried out 5 times weekly for 3 weeks. At each treatment session 50 J/cm$^2$ was given (cumulative UVA1 dose 750 J/cm$^2$). Additional therapy was restricted to the use of emollients. During UVA1-cl phototherapy, erythema and desquamation rapidly decreased and after 3 weeks the lesions were almost completely cleared (Fig. 2). No adverse effects were observed. At present, the duration of complete remission is 6 months.

## DISCUSSION

Various phototherapeutic modalities, e.g. PUVA, broadband UVB, narrowband UVB and balneophototherapy, have been reported to be effective treatments for clearing parapsoriasis. In general, a remission period of about 6 months can usually be achieved with these treatments (4 – 7). UVA1 phototherapy has been reported to be particularly successful for the treatment of severe atopic dermatitis and CTCL (8 – 10). Recent observations indicate that T helper cells, predominantly present in the dermal layers of lesional skin, are important targets for UVA1 therapy (11). Correspondingly, successful UVA1 therapy of CTCL is associated with downregulation of the *in situ* expression of T helper cell-derived cytokines as well as a significant reduction in the number of intradermal $CD4^+$ T cells caused by the induction of T-cell apoptosis (12). Because of the encouraging treatment results obtained previously and the close relationship between CTCL and SPP we decided to treat our patient with UVA1-cl

*Fig. 1.* Erythematous and slightly scaly confluent plaques on the trunk before phototherapy.

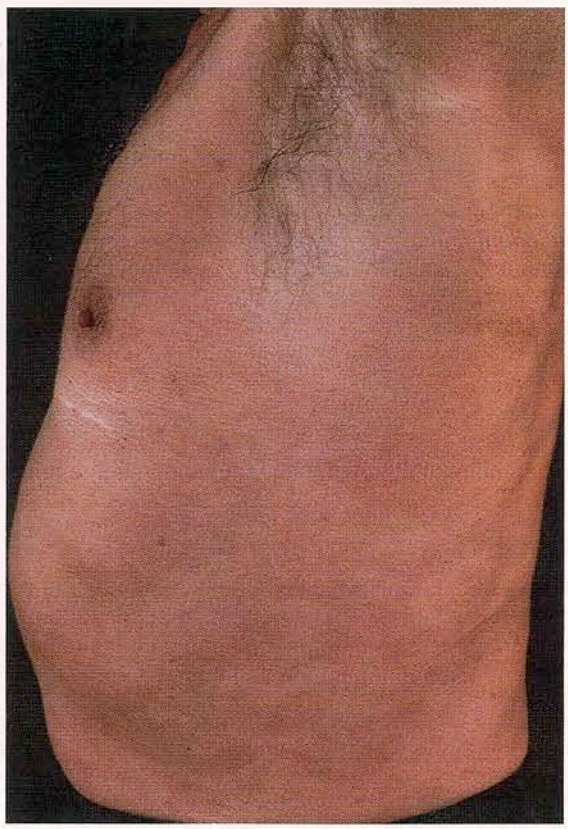

*Fig. 2.* Almost complete clearance of the parapsoriatic plaques after 15 treatments with UVA1-cl phototherapy.

phototherapy. UVA1-cl therapy rapidly reduced the skin eruptions and a remission was observed which is comparable to that achieved with other phototherapeutic options for SPP (4–7). Owing to the extensive reduction of infrared and erythematogenous wavelengths UVA1-cl phototherapy is an excellently tolerated treatment regimen. Thus, UVA1-cl phototherapy could be a treatment alternative for patients with parapsoriasis who do not tolerate or response to UVB therapy and PUVA. Nevertheless, further clinical trials on a larger study population are required to confirm our results.

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# Zosteriform Metastasis of Occult Bronchogenic Carcinoma

*Sir,*

Lung cancer is the primary cause of cutaneous metastases in males and skin metastases may be the presenting clinical sign of an occult primary pulmonary tumour in these patients. Clinically, cutaneous or subcutaneous metastases lack a uniform or distinctive gross appearance. They present as painless, fixed or mobile, firm or rubbery, solitary or multiple masses, 2–10 cm in size, without notable overlying skin changes (1, 2). Sometimes, exudative ulcers can develop as secondary lesions on the top of previous nodules or plaques. We describe here an unusual presentation of cutaneous metastasis from an occult primary bronchogenic carcinoma appearing as a primitive ulcerative facial lesion with zosteriform distribution.

## CASE REPORT

The patient, a 71-year-old man suffering from dyspnoea, dysphagia and declined general health, was admitted with a 5-month history of a primitive indurated ulcer on the right lower part of the face. The lesion, showing a progressive and persistent course, presented a herpes-like, zosteriform distribution because of the unilateral involvement of the right ear, maxilla, mandible, upper labium and chin (Fig. 1). Laboratory investigations were not significant. Histology of a skin biopsy revealed epidermal ulceration and extensive dissemination of tumour cells mainly through the entire dermis. The anaplastic cells, medium or large in size, showed large pleomorphic hyperchromatic nuclei and varying degrees of differentiation and were mainly arranged in single-row lines or in small groups between the collagen bundles (Fig. 2). In some areas of the upper dermis, the cells seemed to fill dilated lymphatic spaces. Chest X-ray, bronchoscopy and axial tomography revealed diffuse pleural effusion and collapse of the left pulmonary parenchyma because of neoplastic obstruction of the left primary bronchus due to bronchogenic adenocarcinoma. The patient died 3 weeks later from pulmonary failure.

*Fig. 1.* Extensive ulcerative lesion of the right part of the lower face showing a zosterform distribution.