INTRODUCTION

Palmoplantar psoriasis (PPP) presents with typical scaly patches sometimes studded with sterile pustules. It is chronic, very resistant to treatment and can lead to severe disabilities. Monochromatic Excimer Light (MEL) is a UVB radiation (308 nm) generated by a new light source and is used for the first time in the treatment of this disorder. Eleven patients affected by PPP were treated for 10 weeks using MEL @ 308 nm (Excilite DEKA - Florence - Italy), with maximum irradiating area of 512 cm². At the end of the six-week treatment all patients showed an improvement varying from 75% to 100%. No relapse was noted at the 16-week follow-up. At the 12-week post-treatment observation one patient showed only some scaly elements on plants. In contrast to traditional ultraviolet phototherapy, MEL clears PPP very quickly and it can be used without any drug association therapy. Compared to excimer laser, MEL, a sealed-off device with a maximum irradiating area of 512 cm² offers several advantages especially in the treatment of medium-large psoriatic areas such as palms and soles.

PATIENTS AND METHODS

Patients. Eleven patients of both sexes (eight men and three women, age range 31-64) with clinically defined PPP were recruited. Four of them presented pustular pattern. Patients were required to discontinue both topical treatments and phototherpay for 4 weeks and all systemic treatments for at least 6 months before enrollment.

**Key words: palmoplantar psoriasis, excimer light, phototherapy**
Tab. 1. Study protocol: three times for the first four weeks of treatment and twice a week for the 5th and 6th week until exposure time of 90 seconds was reached; for the period comprised between the 7th and 10th week a maintenance dose (90 seconds once a week) was provided.

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(Tab. I). No topical treatment was applied to psoriatic plaques before treatment with the MEL. Clinical evaluation was done every 2 weeks during the period of therapy and the follow-up (range 12-16 weeks after last irradiation). No additional treatment except for petrolatum cream was applied during the period of study.

RESULTS

At the end of the 6th week of treatment all patients showed an improvement ranging from 75% to 100% (as evidenced by flattening of plaques, decreased scaling and erythema, and decreased vesicle and pustule formation) and further improvement was noted at 10th week. No relapse was detected at the 16-week follow-up (Fig. 1a, 1b, 2a, 2b, 3a, 3b). Only one patient showed few scaly elements on palms at the 12-week post-treatment observation. Unwanted side-effects such as erythema, pain, blistering or hyperpigmentation were not observed. Therapy was well-tolerated by all patients.

CONCLUSIONS

PPP presents with typical scaly patches

![Fig. 1a. Diffuse pattern of pustular psoriasis on palms of a subject with palmoplantar psoriasis.](image1)

![Fig. 1b. No relapse of pustules sixteen weeks after the last MEL (Excilite) irradiation.](image2)

![Fig. 2a. Palms of a subject with psoriasis vulgaris.](image3)

![Fig. 2b. Sixteen weeks after the last session.](image4)
sometimes studded with sterile pustules. In the pathogenesis of the disease there may be a relationship to trauma or occupational irritants and preventive measures in avoiding friction and irritants can reduce the morbidity of the disease (6). PPP is a disabling condition that is usually resistant to most of the available therapeutic modalities and characteristically indolent. Septic foci have been blamed in the past for palmoplantar pustulosis, but their removal in fact cannot cure the eruption that actually occurs in the absence of any demonstrable focus of sepsis (7).

It is demonstrated that wavelengths between 300 and 313 nm have therapeutic effects in psoriasis (8) and that 311-nm narrow-band phototherapy is an effective treatment (5). Recent works (9-11) have established that acitretin combined with UVA and topical 8-MOP is effective in palmoplantar pustulosis such as colchicine or oral liarozole. In contrast to traditional ultraviolet phototherapy, the MEL can achieve quick clearance and it can be used without any drugs. Compared to excimer laser, the MEL offers several advantages. In facts, this new therapy is able to perform a more uniform and fast treatment of the skin lesion, not mentioning that this device has sealed-off source instead of having toxic gas bottles. The possibility to clear quickly and selectively psoriatic areas (saving uninvolved skin from long-term UVB effects) with a well-tolerated and safe modality may represent a new strategy in the treatment of psoriasis and probably of other immunomediated skin diseases too (12).

REFERENCES