PHOTOTHERAPY, PHOTODYNAMIC THERAPY

TIME TO WAIT? TOPICAL REGIMENS IN HAND/FOOT PUVA

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Background: In the absence of controlled studies providing a universal protocol for treating palmoplantar dermatoses with topical PUVA, phototherapy units throughout the UK have adopted varying protocols from 0-30 minutes between immersion/illumination. No difference in outcomes could reduce the time taken to treat patients, increasing the number of patients treated.

Method: This was a within-patient, randomised, single-blinded, pilot study comparing 2 treatment regimens in 8 patients with eczema/psoriasis of either their hands/feet.
Hands/feet were pre-treated with topical psoralen. One site was illuminated immediately with UVA light and the other 30 minutes later. An independent assessor evaluated symptoms (global severity) and a total lesion score comprising: Erythema, Thickness, Scaliness, Fissures, Pruritus/Pain, Vesiculation and Oedema, before the first treatment, 4-weekly intervals throughout the treatment and at the final visit. Photographs were taken at baseline and final visits.

Results: Eight patients (4 females,4 males) were recruited. Age ranges between 44–67years (mean 52 years). One patient withdrew from the study. The phototypes of the remaining patients were: two patients–skin type II, five patients–skin type III. Three patients had eczema and four patients had psoriasis affecting their hands/feet. The results show that patients with both hand/foot eczema and psoriasis improved during the course of treatment with regards to the Total Lesion Score and Physician's Global Assessment. 2 patients were clear by week 20. One patient with hyperkeratotic psoriasis affecting plantar sites perceived definite improvement with 30 minutes interval prior to illumination.
There was no statistically significant difference in the Total Score and Physician's Global Assessment between immediate/delayed illumination.

Conclusion: The sample size was too small to draw statistically sound conclusions but strongly suggested immediate irradiation was generally suitable, except in hyperkeratotic conditions where the 30 minute delay allowed perfusion to the viable epidermis. A larger patient cohort is required for confirmation.