

UVA/UVB phototherapy for atopic dermatitis revisited.

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BACKGROUND: Atopic dermatitis (AD) is a genetically determined pruritic skin disease affecting predominantly young people. The therapy of AD includes mainly corticosteroids (CS), antihistamines and immunosuppressors. CS are known to cause a variety of side effects and attempts have been made to reduce or eliminate their use through alternative methods such as phototherapy (UVA/UVB, UVA(1), UVB 311 nm). In order to optimize therapeutic efficacy the effects of CS and UV radiation are often combined. **OBJECTIVE:** To evaluate the efficacy of UVA/UVB and UVA/UVB plus topical CS phototherapy of AD and to compare the two regimens with regard to their therapeutic effect, duration of treatment and remissions, cumulative UVA and UVB doses and side effects. **METHODS:** Thirty-one patients (mean age 19 years) with moderate-to-severe forms of AD were enrolled in the study (mean disease duration of 17.7 years). Seventeen patients were treated with UVA/UVB phototherapy (Group I). Fourteen patients received UV irradiation combined with topical CS (Group II). The starting UVA dose was 2-2.5 J/cm². The initial UVB dose depended on skin phototype. The procedures were held five times weekly. In order to evaluate therapeutic efficacy, 10 severity criteria and 10 topographic sites were scored at the beginning and at the end of treatment. **RESULTS:** A statistically significant difference in the severity of the disease was observed before and after phototherapy in both groups (overall clinical score Group I: $t=10.1$, $p=0.0001$; Group II: $t=13.9$, $p=0.0001$). Erythema ($t=12.1$, $p<0.0001$), excoriations ($t=10.1$, $p<0.0001$) and vesiculation improved most dramatically after UVA/UVB phototherapy. Lichenification ($t=2.5$, $p=0.024$), xerosis ($t=10.2$, $p<0.001$) and pruritus ($t=13.7$, $p<0.0001$) also diminished significantly. The combination regimen had a similar effect on different severity criteria, but initial signs of improvement appeared earlier. Side effects observed during phototherapy included erythema, burning, skin xerosis and sweating. No statistically significant difference was established between the therapeutic efficacy of the two treatment modalities ($t=0.2$, $p=0.904$), but the addition of CS reduced the duration of treatment (number of procedures: $t=2.5$, $p=0.02$) and total UVB dose ($t=2.3$, $p=0.03$). There was no significant difference between the duration of remissions ($t=0.9$, $p=0.39$) and frequency of side effects in the two groups of patients. **CONCLUSION:** Both UVA/UVB monotherapy and UVA/UVB + topical CS lead to significant clinical improvement in patients with AD, but the addition of CS reduces the total UVB dose and duration of treatment without influencing the duration of remissions and frequency of side effects.

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- [Clinical Trial](#)
- [Randomized Controlled Trial](#)

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