

Inhibition of immediate type hypersensitivity reaction by combined irradiation with ultraviolet and visible light.

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Recently we found that ultraviolet B (UVB) irradiation in erythematous doses significantly inhibited the immediate type hypersensitivity reaction in the skin. In the present study we investigated the effects of different wavelengths on the skin prick test reaction (SPT). The forearm of ragweed allergic patients was irradiated with increasing doses of ultraviolet A (UVA), visible light (VIS) or combined UVB, UVA and VIS light, referred to as mUV/VIS. SPTs were performed 24 h after irradiation both on irradiated and non-irradiated control skin areas using ragweed extract. UVA and VIS irradiation led to a slight, not significant inhibition of allergen-induced wheal formation. Mixed irradiation with mUV/VIS light resulted in a dose-dependent inhibition of the allergen-induced wheal formation. The inhibition was significant already at suberythematous doses. As there is a good correlation between SPT and the nasal symptoms in patients with hay fever these data suggest that phototherapy with mUV/VIS light might be an effective and safe treatment modality for immediate type hypersensitivity reactions in the skin and nasal mucosa.

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

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