

Effect of Cluster Allergen-Specific Immunotherapy in Patients with Atopic Dermatitis Sensitive to House Dust Mite

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Atopic dermatitis (AD) is a chronic IgE-mediated skin disorder. Clinical usefulness of allergen-specific immunotherapy in the treatment of AD is still controversial. We assessed the effect of cluster allergen-specific subcutaneous immunotherapy (SCIT) in patients with AD sensitive to house dust mite. The study included 43 patients (32 with mild to moderate AD and 11 with severe AD). Disease severity was assessed by SCORAD index. Patients were treated by cluster SCIT for 8 weeks. SCORAD index, total IgE serum level and blood eosinophilic count (BEC) were assessed at the baseline visit and after the end of immunotherapy. Thirty-one patients (72.1%) responded to SCIT. Responders showed significant decrease in SCORAD index ($P < 0.001$) and BEC ($P < 0.05$) compared to non-responders. SCORAD index, total IgE and BEC were significantly decreased in responded patients after SCIT compared to the baseline. The reduction in SCORAD index was 49%. Patients with mild to moderate AD showed no difference in the serum IgE level after SCIT compared to the baseline, but a significant difference was reported in the SCORAD index and BEC. Patients with severe AD showed significant difference in SCORAD index, total IgE, and BEC between baseline and post-SCIT values. Patients with mild to moderate AD showed more reduction in SCORAD index than patients with severe AD (53.8% vs. 43.6%). No adverse reactions were reported during immunotherapy. We concluded that cluster allergen-specific immunotherapy is an effective and well-tolerated therapeutic modality for both mild to moderate and severe AD.