



Safety of an accelerated dose escalation scheme for an one strength subcutaneous allergen immunotherapy preparation in patients with allergic rhinitis triggered by house dust mite allergens.

Anna Kosowska^{1,2}, Magdalena Zemelka-Wiacek², Ewa Popowicz^{1,2}, John Zajac^{1,2}, Marek Jutel^{1,2}

¹ALL-MED Medical Research Institute, Wroclaw, Poland ²Department of Clinical Immunology, Wroclaw, Medical University, Wroclaw, Poland

Introduction

Allergen immunotherapy (AIT) is currently the only known treatment for IgE-mediated allergy. The effectiveness of treatment is influenced by patient compliance. Shortened dose-escalation may increase patients' acceptance for AIT and adherence during AIT.

Aim

To evaluate the safety of an accelerated dose escalation regimen with 5 injections using one strength of an unmodified, aluminium hydroxide-adsorbed house dust mite (HDM) preparation for subcutaneous AIT.

Material and methods

Patients > 18 years of age with symptoms of allergic rhinitis for at least 2 years were included in this single-center, open, prospective study. HDM-induced allergy was confirmed by positive skin prick results, specific IgE for D. pteronyssinus and/or D. $farinae \ge 0.7$ kU/l, and by exposition in an environmental challenge chamber. Patients received 6 weekly injections of HDM AIT: 5 injections for dose escalation and one maintenance dose. Local reactions were assessed when the diameter exceeded 10 cm. Systemic reactions are classified according to WAO.

Results

Twenty patients aged 20 to 54 years were enrolled in the study. All patients suffered from allergic rhinitis, 8 additionally from HDM allergic asthma. All patients completed the treatment regimen, 18 without dose





modification. Local reactions occurred in 9 patients. Two patients experienced a systemic reaction. One was Grade 1, the other Grade 2. Both patients were given the appropriate dose again the following week and completed the treatment with no further systemic reactions.

Conclusions

AIT with an unmodified, aluminium hydroxide-adsorbed HDM preparation according to an accelerated dose escalation scheme in patients with allergic rhinoconjunctivitis with or without HDM allergen-induced asthma is safe and well tolerated.

The authors declare no conflict of interest.