ORIGINAL ARTICLE

Effect of Immunotherapy on Eosinophil Activation in Pollen Sensitive Children

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SUMMARY

Immunotherapy is a well documented method for treatment of children with allergic airway diseases and allergic rhinitis. The aim of this investigation was to establish the effect of immunotherapy on the presence and activation state of eosinophils in pollen sensitive patients, measured by eosinophil counts and their degranulation product in serum, eosinophil cationic protein in comparison with the (specific) IgE concentration in pollen sensitive patients. In both groups intra-individual variations in (specific) IgE concentrations, due to increase of pollen exposure, were not observed. Blood eosinophil counts and serum ECP concentrations showed consistent results after starting immunotherapy. Overall release of ECP per eosinophil remained also unaffected after the start of immunotherapy. Results of ECP concentrations and eosinophil counts in the subjects' group did not show any deviation when compared with the control subjects' group. It is concluded that the laboratory parameters are not helpful in monitoring the efficacy of immunotherapy in patients with seasonal rhinitis. (Clin. Lab. 2001;47:231-238)