

Evaluation of IL10, TGF- B and specific IgE and IgG levels during sublingual Ryegrass immunotherapy

Akefeh Ahmadiashar

Zanjan University of Medical Sciences, Iran

Background: Sublingual immunotherapy (SLIT) is a safe mechanism for treatment of some allergic disorders. This study investigated the effect of SLIT on specific IgG, IgE, Interleukin 10 (IL10) and Transforming growth factor beta (TGF- β) levels.

Material and Methods: This randomized double blind trial was performed 2 months prior to the grass pollination till the end of the season for about 6 months. Patients (5-18 yrs old) with allergic rhinitis to ryegrass pollen, randomly received grass pollen or placebo extract and specific IgG and IgE level were assessed. IL10 and TGF- β were also measured before and after treatment. Data were analyzed by SPSS software.

Results: Twenty of 24 patients completed the study. We did not find any significant difference in specific IgG and IgE levels before and after study between the two groups, however there was statistically significant elevation of IL10 (PV=0.003) and TGF- β (PV=0.006) levels after immunotherapy in the intervention group

Conclusion: This study showed sublingual immunotherapy had significant effect on regulatory cytokines.

akefeh45@zums.ac.ir