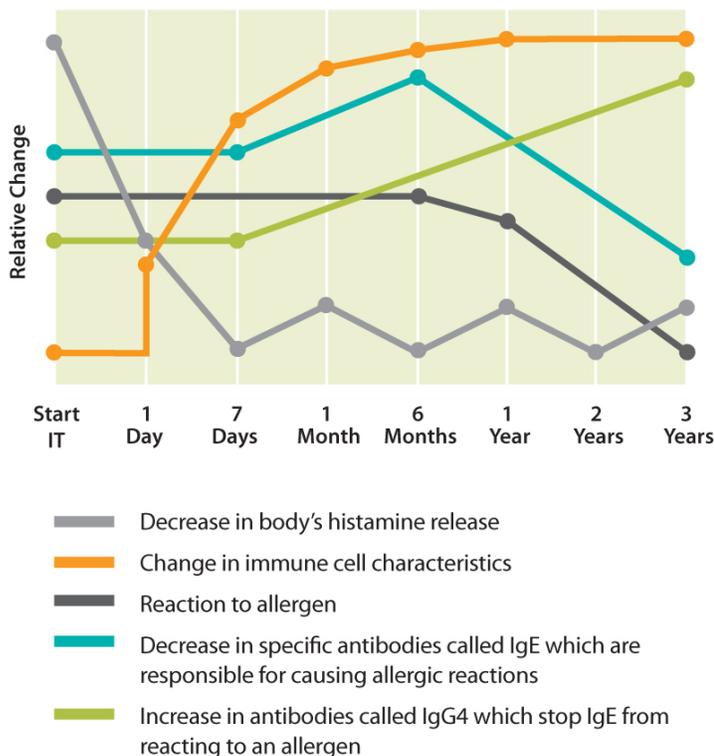


The Pollen

Issue N°2 - Compliance with Immunotherapy

Immunotherapy (IT) is commonly viewed as a long and drawn out process, taking up to three years to fix allergic symptoms, whereas antihistamines can take minutes to hours to work. The discrepancy though is that antihistamines will only work on an as needed basis while IT has been shown to provide relief for up to twelve years after discontinuation of a 3-year course of IT.¹

The following figure shows the changes of the immune system over a 3 year course of IT:²



The key note of this graph is where the IgG4 and IgE lines cross. Not until the body has more blocking antibodies (IgG4) than symptom inducing antibodies (IgE). This has been shown to happen after 1-2 years of IT.

Quitting IT before this change has occurred can lead to increased severity or amount of symptoms.

In a study by Cohn and Pizzi, 25% of patients with allergic rhinitis and asthma quit IT early due to “feeling better”.³ It is important to educate patients that even though relief may occur before the end of therapy, it is critical to continue treatment to achieve long-term benefit.

Similarly patients often have unrealistic expectations of IT. Senna et al. found that 18% of patients thought that IT should have significant results within days of beginning treatment.⁴ Thus, it can be inferred that increasing patient education will increase compliance with treatment.

1. Eng PA, Borer-Reinhold M, Heijnen IAFM, et al. Twelve-year follow-up after discontinuation of preseasonal grass pollen immunotherapy in childhood. *Allergy*. 2006; 61: 198-201.

2. Soyer OU, Akdis M, Ring J, et al. Mechanisms of peripheral tolerance to allergens. *Allergy*. 2013; 68: 161-170.

3. Cohn JR, Pizzi A. Determinants of patient compliance with allergen immunotherapy. *J Allergy Clin Immunol*. 1993; 91: 734-737.

4. Senna GE, Makatsore M, Schiappoli M, et al. Subcutaneous allergen specific immunotherapy: best clinical practice as cornerstone for future development. *Eur Ann Allergy Clin Immunol*. 2011; 43(5): 135-140.