Efficacy and safety of food allergy oral immunotherapy in adults

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June 30, 2022

Abstract

Background. Oral immunotherapy (OIT) is an emerging method for treating food allergy in children. However, data regarding adults undergoing this process is lacking. Methods. We retrospectively analyzed the medical records of patients with food allergy aged ≥17 years who completed OIT treatment between April 2010 to December 2020 at Shamir medical Center. Data was compared to that of children aged 4 to <11 years and adolescents aged ≥11 to 17 treated during the same time period. Results. A total of 96 adults at a median age of 22.3 years who underwent OIT for milk (n=53), peanut (n=18), sesame (n=7), egg (n=5) and tree nuts (n=13) were analyzed and compared to 1299 children and 309 adolescents. Adults experienced more adverse reactions requiring injectable epinephrine, both during in-clinic up-dosing (49% vs. 15.9% and 26.5% for children and adolescents respectively, p<0.0001) and during home treatment (22.9% vs. 10.5%, p=0.001 for children, and 14.2%, p=0.06 for adolescents). Most adults (61.5%) were fully desensitized, but rates of full desensitization were significantly lower compared to children (73.4%, p=0.013). Significantly more adults (28.3%) undergoing milk OIT failed treatment compared to children (14.3%, p=0.015) and adolescents (14.1%, p=0.022), while failure rates in adults undergoing OIT for other foods were low (9.3%) and comparable to children and adolescents. Conclusions. OIT is successful in desensitizing most adults with IgE-mediated food allergy. Adults undergoing milk OIT are at increased risk for severe reactions and for OIT failure while failure rates in adults undergoing OIT for other foods are low.

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Figure 3s

[Graph showing data for different food allergies (Peanut, Treenuts, Sesame, Egg) in children, adolescents, and adults.]

- Full desensitization
- Partial desensitization
- Failure

% patients

Milk, Non-milk

Epinephrine - in clinic
Epinephrine - home

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