

Sesame Allergy in Children: New Insights in Diagnosis and Management

MD, MSc Sarah Saf¹, Magnus Borres², and Eva Södergren²

¹Universite Paris 1 Pantheon-Sorbonne Bibliotheque Pierre Mendes France

²Thermo Fisher Scientific ImmunoDiagnostics Division

January 13, 2023

Abstract

Sesame is a potentially potent allergen that can trigger skin, gastrointestinal, and respiratory tract symptoms, and anaphylaxis. Only 20% to 30% of sesame-allergic children develop tolerance. The prevalence of sesame allergy depends on local diets and ranges from 0.1% to 0.9%. A high risk of accidental exposure to sesame has resulted in mandatory food labeling in many countries. More than half of patients with sesame allergy are also allergic to peanut/tree nuts. Serum specific IgE testing with a quantitative Ses i 1 component can be performed safely and has higher clinical specificity and better positive predictive value for oral food challenge (OFC) than whole sesame extract or skin prick testing (SPT). Compared with SPT or OFC, *in vitro* Ses i 1 testing requires no special techniques and carries no risk of reactions. Diagnosis of suspected sesame allergy begins with a thorough history and physical examination. A positive sesame extract test (≥ 0.1 kU_A/L) should prompt further testing. In patients with a high probability of reacting, results of component testing may facilitate a decision about performing an OFC. In a Japanese study of OFC and Ses i 1, there was a 5% probability of a positive OFC with Ses i 1 sIgE levels <0.13 kU_A/L, and a 50% probability of a positive OFC with levels >32.0 kU_A/L. Most patients could safely consume sesame if sIgE levels were <0.13 kU_A/L. Ses i 1 testing can be used to guide appropriate management (avoidance, emergency medication, and oral immunotherapy).

Hosted file

SesameReview_PA1_12-22-22MainDocv3.docx available at <https://authorea.com/users/575836/articles/618844-sesame-allergy-in-children-new-insights-in-diagnosis-and-management>