2023 Annual Research Day Poster Sessions – April 19th, 2023

Session/Poster#	Presenter
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Clinical Features Of Peanut And Tree Nut Allergy In An Urban Minority Pediatric Population

Rationale: Recent studies suggest that there is an increasing trend of peanut and tree nut allergies worldwide in the last decades. However, data regarding peanut and tree nut allergies among minority pediatric patients are limited. Methods: A retrospective chart review was performed on patients who were diagnosed with food allergy at the pediatric allergy clinic of SUNY Downstate from 2018 to 2021. Patient's demographic data, food allergy history, skin prick test, and specific IgE levels were reviewed. Results: Among our 142 patients diagnosed with food allergies, 85.9% were African American. More than half of those with food allergies (94/142, 66.2%) had a tree nut/peanut allergy. Peanut was most commonly implicated in first time reactions (56/94, 59.6%) followed by pistachio (4/94, 4.3%) and cashew (3/94, 3.2%). Fifty-nine percent of patients with nut allergy have reactions to more than one type of nut. Many patients had underlying atopy: eczema (60/94, 63.8%), allergic rhinitis (44/94, 46.8%), and asthma (42/94, 44.7%). Skin was the most commonly involved organ system (80/94, 85.1%) while 14.9% (14/94) of patients had anaphylaxis. Average age of first nut reaction was 41.6 months while mean age of nut introduction was 24.9 months. Average wheal size for skin prick test was 10 mm and average level of specific IgE to nuts that caused a reaction was 40 kU/L. Average wheal size was larger in anaphylaxis group when compared to non-anaphylactic group (13.8 VS 9.4 mm, $p = 0.04$) Discussion: Peanut allergy was found to be the most common peanut/nut allergy among African American pediatric patients. More than half of the patients had multiple nut allergies. Patients with tree nut/peanut allergy were found to have a late nut introduction. Future interventions to increase implementation of early peanut/nut introduction may be crucial for the prevention of development of peanut/nut allergy.