Prevalence of food allergy among preschool children in northern Thailand.

Lao-araya M¹, Trakultivakorn M.

Abstract

BACKGROUND:
The epidemiology and clinical spectrum of food allergies (FA) confirmed by oral food challenge tests (OFC) in the Southeast Asian countries are limited. The aim of the present study was to examine the prevalence and characteristics of FA among preschool children in northern Thailand.

METHODS:
Five hundred and forty-six children aged 3–7 years living in Chiang Mai, Thailand participated in this study. A cross-sectional parent questionnaire survey was conducted. Families with children reporting FA were invited to undergo further investigations with skin prick testing, serum specific IgE, and OFC.

RESULTS:
A total of 452 out of 546 questionnaires (82.8%) were returned. Forty-two children (9.3%) were reported to have FA. The five leading allergic foods reported were shrimp, cow's milk, fish, chicken eggs, and ant eggs. The most commonly reported symptom was a skin rash (78.0%), followed by abdominal pain and vomiting (31.1%). Anaphylaxis was found in two children (3.4%), from ant eggs allergy. Eighteen children underwent OFC; five of them were positive to shrimp, fish, and crab. Either skin prick test or serum-specific IgE was positive in these children. Factors associated with parent-reported FA included personal and family history of atopic dermatitis.

CONCLUSIONS:
The prevalence of IgE-mediated FA confirmed on OFC was ≥ 1.11% (95% confidence interval: 0.41-2.98%). The most common causative food was shrimp. Ant eggs were a unique food allergen causing severe reactions in preschool children in northern Thailand.