Epidemiology of food allergy and associated atopic disorders in Saudi Arabia (single referral center experience)

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Background: Food allergy affect up to 8% of children and 3% of adult in the United State and several studies have noted racial discrepancies in prevalence. There is great lack of data about epidemiology of food allergy and associated atopic disorder in Saudi Arabia.

Objective: To explore Epidemiology of food allergy and associated atopic disorder in Saudi Arabia.

Method: This is a retrospective study that is still in progress. We collected so far 128 patients evaluated for presumed food allergy in eight allergy clinics out of 1360 patient seen in the clinics in one referral Center in Riyadh/Saudi Arabia, between 1st January and 30 April, 2016. We assessed patient’s demographic data, offending food allergens, presenting manifestation, associated atopic disorder, diagnostic measures and treatment plans.

Result: The study included 103 patient out of 128 who had complete data, on their clinical symptoms and objective diagnostic measures of food allergy (RAST, ASPT, oral challenge). The pediatric patients were (79%) of the total number of patients, Male (63%) of all patients. Prevalence of Food allergy among adult (≥14yrs) patients was 1.5%, while among pediatric patients 6%. Overall the most common offending food allergens were Egg (40%), sesame (39.8%), Tree nuts (39.7%), Milk(28%), Peanut (24%), Fish (21%) Wheat (13%), Shell fish (9%), Soy (7%), Legume (6%). Regarding the presenting manifestation Mucocutaneous were the most common symptoms affecting (43%) of patients followed by anaphylaxis in (32%), pulmonary in (13%) and Gastro-intestinal (6%). Overall (60%) of patients with food allergy had other associated atopic disorder namely bronchial asthma, Allergic rhinitis and atopic dermatitis.

Conclusion: This is the very first study exploring the epidemiology and Prevalence of food allergy among Saudi patients who visited allergy clinics in a referral center.Preliminary results revealed the food allergy affects 1.5% of adults and 6% pediatric population Egg followed by sesame, nuts, milk, peanut are the more common offending food allergens in Saudi Arabia. Most presenting feature are mucocutaneous followed by anaphylaxis. Majority of the cases associated with other atopic disorder.This study is still in progress, and data will be collected from other centers around the country to have a more accurateand complete picture.