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Original Article

Self-reported prevalence of clinical features of allergy to nuts and seeds, and seafood in university students

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ABSTRACT

Background: In developing countries, there is a lack of epidemiological information related to food hypersensitivity, including nuts and seafood.
Objective: The aim was to determine the prevalence of allergic reactions and clinical manifestations associated with the consumption of nuts and seeds or seafood in university students.
Methods: We designed an observational cross-sectional study. A structured questionnaire was applied to Mexican university students to identify allergic reactions associated with the consumption of nuts and seeds, and seafood.
Results: A sample of 1,200 students was included; mean age of 19.7 ± 1.7 years. Prevalence of symptoms associated with the consumption of nuts and seeds, and seafood were 2.8% (33 of 1,200) and 3.5% (42 of 1,200) respectively. The main clinical manifestations were abdominal pain (63.6% in nuts and seeds), flushing (50% in seafood), and pharyngeal oppression (19% in seafood). Prevalence of perceived, probable and systemic allergy to nuts and seeds was 2.8% (95% confidence interval [CI], 2.5%–3.0%), 0.8% (95% CI, 0.3%–1.3%) and 0.2% (95% CI, 0%–0.4%) respectively. On the other hand, the prevalence (perceived, probable, and systemic) associated with seafood consumption was 3.5% (95% CI, 2.5%–4.5%), 1.8% (95% CI, 1.0%–2.5%), and 0.5% (95% CI, 0.1%–0.9%). Walnut and shrimp were the most frequently reported foods.
Conclusion: For every 100 Mexican university students, approximately 3 or 4 perceived to have allergy attributed to the consumption of some nuts and seeds or seafood, while 1 or 2 students would have a probable reaction to this same type of food. Walnut and shrimp would be causing the higher quantity of food allergic reactions.

Keywords: Nut and seed allergy; Seafood allergy; Self report; Prevalence; Young adults

INTRODUCTION

The increase in the prevalence of food allergy, observed in some regions of the world, it has been considered as a second wave in the epidemic of allergic diseases [1]. This phenomenon has been observed, both in pediatric and adult population [2, 3]. The prevalence of self-reported food allergy shows variations ranging from 0.4% to 6.0% [4].

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