Abstract Group: 7.2. Paediatric Asthma and Allergy
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Title: Peanut allergy and asthma: A dangerous liaison?

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Body: Objectives: Peanut allergy (diagnosed by sensitization to peanut) has been associated with increased risk of severe asthma and anaphylaxis in tertiary care centres. We determined the association between (the severity of) asthma and peanut allergy diagnosed by standardized food history and food challenges in children from primary and secondary care. Methods: We conducted a prospective cohort study among 280 peanut-sensitized children (0-18 yrs of age), referred for sensitization testing by general practitioners and paediatricians between 2003 and 2010. Diagnosis of peanut allergy was made or rejected in a stepwise fashion. Children who reported ingestion of peanut and no symptoms in a food allergy quality of life questionnaire or detailed food history were considered to be peanut tolerant. All others were invited for open or double-blind peanut challenges. Children who consistently reported wheeze or shock after peanut exposure were classified as anaphylaxis. Asthma was assessed by ISAAC and asthma control questionnaires, and spirometry. Results: Levels of peanut-specific IgE were not significantly different between the 139 children with and 141 children without asthma (p=0.456). Asthma was more likely in children with peanut allergy (n=32, 61.5%) than in those without (n=85, 44.7%, p=0.032), but children with asthma were no more likely to have anaphylaxis than those without (p=0.242). Most cases of asthma were well controlled (ACQ <7, 74%); there was no association between asthma control, peanut allergy and peanut sensitization. Conclusion: In this cohort of children from primary and secondary care, peanut allergy is associated with an increased risk of asthma, but not with poor asthma control or an increased risk of anaphylaxis.