CPSP
CANADIAN PAEDIATRIC SURVEILLANCE PROGRAM

One-time survey results

Behaviours and practices towards food allergies

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M Ben-Shoshan[1], M Desjardins[1], G Shand

A one-time survey was mailed to all 2,573 CPSP participants to assess the attitudes of Canadian allergists and paediatricians (non-allergists) towards non-controversial and controversial issues related to food allergy and food-induced anaphylaxis. Since accessibility to allergy specialists is variable across Canada and usually limited outside urban areas, paediatricians are playing a major role in the care of patients with allergic diseases. However, attitudes of allergists and non-allergists may differ for both non-controversial and controversial issues. The survey aimed to identify knowledge gaps that need to be bridged through appropriate educational programs. There were 533 CPSP responses, 25 from allergists and 508 from paediatricians (response rate 21%). Through parallel surveillance, 89 additional allergists were recruited from their medical association, the Canadian Society of Allergy and Clinical Immunology (CSACI). Overall, 114 allergists answered the survey.

Non-controversial issues

According to the 2010 Canadian consensus guidelines on the management of anaphylaxis in the primary care setting, the preferred route of epinephrine administration is intra-muscular (IM). In addition, although not mentioned in the consensus guideline, most experts now agree that for those with egg allergy, MMR immunization does not need to be given in a hospital setting as long as the immunization provider has an emergency kit containing epinephrine and is familiar with its use.

The survey revealed that 93% of allergists believe IM is the preferred route of epinephrine administration, versus 71% of paediatricians. Among allergists, less than 3% prefer the subcutaneous route. A smaller proportion of allergists compared to paediatricians require MMR immunization in a hospital facility in children with egg allergy (4% versus 12%).

Controversial issues

The appropriate age of introduction of allergenic foods remains controversial. The 2008 American Academy of Pediatrics' revised position statement stipulated that there was no convincing evidence to support delaying the introduction of solid foods beyond the age of 4–6 months, including allergenic foods like egg white, in order to prevent food allergies. Also, there are no guidelines regarding the optimal timing for epinephrine administration during an allergic reaction, but it is clear that a delay in initiating therapy may result in increased morbidity and mortality in cases progressing to anaphylaxis. Hence, we queried physicians on these issues to assess their actual recommendations.

The survey revealed that allergists were less likely than paediatricians to recommend delayed introduction of egg white to children with and without a family history of atopy (with family history: 43% versus 61%; without family history: 22% versus 50%). When managing food-induced anaphylaxis, respondents tend to administer epinephrine to patients with allergic reactions involving generalized or systemic symptoms. Yet, more than 25% would not give epinephrine even when the patient has breathing difficulties or symptoms consistent with hypotension.

Conclusion

For non-controversial issues, a greater proportion of allergists adhere to current guidelines or literature recommendations. Surprisingly, 25% of respondents, regardless of their subspecialty, would not administer epinephrine for severe anaphylaxis, a situation in which it is clearly indicated. Future education programs need to address these gaps to avoid unnecessary restriction of MMR immunization and ensure prompt delivery of epinephrine when there is a concern that the allergic reaction may progress to anaphylaxis. These recommendations should be continuously updated to reflect advances in care. Finally, more research is required to determine best practices regarding appropriate age of introduction of allergenic foods.

[1] **Principal investigators**

Moshe Ben-Shoshan, MD, Division of Allergy and Clinical Immunology, Department of Paediatrics, McGill University Health Centre, Montréal QC H3A 1A1 ; tel.: 514-934-1934, ext. 44718; moshebenshoshan@gmail.com

Marilyn Desjardins, MD, Research Fellow, McGill University, Montréal QC H3A 1A1; marylin.desjardins@mail.mcgill.ca