Food-induced anaphylaxis common among children despite adult supervision

14 December 2017

At least a third of reactions in children with food-induced anaphylaxis to a known allergen occur under adult supervision, according to a new study led by AllerGen researchers in Quebec, Ontario and Alberta.

The findings, published in the November issue of Pediatric Allergy and Immunology, reveal that inadvertent exposures to a known food allergen in children are frequent, and in the majority of supervised reactions, adults other than the child's parents were present.

"Food accounts for the majority of anaphylaxis cases in children presenting to the emergency department," says the study’s senior author Dr. Moshe Ben-Shoshan, a pediatric allergist and immunologist at the Research Institute of the McGill University Health Centre (RI-MUHC) and at the Montreal Children's Hospital of the MUHC. "We were interested to find out how often parents and caregivers are present when exposures to food allergens happen, and to estimate the impact of other factors such as food-labelling issues." This is the first study to evaluate risk factors of food-induced anaphylaxis to a known food allergen in children.

Anaphylaxis, known to be a sudden and potentially life-threatening allergic reaction, was defined in the study as a reaction involving at least two organ systems and/or a sudden drop in blood pressure.

The researchers collected data from pediatric anaphylaxis cases seen at four Canadian emergency departments between December 2012 and April 2015, as part of AllerGen's nationwide Cross-Canada Anaphylaxis REgistry (C-CARE). C-CARE is led by RI-MUHC researcher Dr. Ben-Shoshan and is the first prospective study on anaphylaxis to assess the rate, triggers and management of anaphylaxis in different provinces and settings across Canada.

"Our team found that 31.5% of anaphylaxis cases occurred under adult supervision, and in the majority of those cases (65%), the supervising adult was not the child's parent," says Dr. Ben-Shoshan who is also an assistant professor of Pediatrics at McGill University. "These findings highlight the importance of increasing education and awareness among all caregivers of food-allergic children."

The role of food labelling was also highlighted in the research. "A third of all reactions were attributed to food-labelling issues according to the participants," adds the study's lead author Dr. Sarah de Schryver, an AllerGen trainee and a Research Fellow at McGill University. "However, most reactions to labelled food occurred when the label was ignored, which indicates that better management strategies are needed to avoid accidental ingestions both inside and outside the home."

Provided by McGill University Health Centre

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