A Majority of Parents of Children With Peanut Allergy Fear Using the Epinephrine Auto-Injector


**PURPOSE OF THE STUDY.** The purpose of this study was to identify factors that may contribute to parental fear of using an epinephrine autoinjector (EAI).

**STUDY POPULATION.** The study included 1229 parents of children with peanut allergy, all of whom had been prescribed an EAI. The mothers had a mean age of 37.9 years, and the fathers had a mean age of 40 years.

**METHODS.** Children with peanut allergy were retrospectively identified from 2000 to 2004 through chart review, and they were prospectively identified between 2004 and 2011 at their visit to Montreal Children’s Hospital. Parents of these children were mailed a questionnaire on whether and why they feared using an EAI, if their child had ever received an EAI, who prescribed the EAI, their level of satisfaction with the EAI training they received, the interval between reaction to prescription of the EAI, the type of EAI they were prescribed, whether they had changed devices, and the number of EAIs purchased. Fear was characterized as “afraid,” “somewhat afraid,” or “not afraid.”

**RESULTS.** Fifty-six percent of parents reported being afraid or somewhat afraid to use the EAI. The most commonly reported fears were hurting the child, incorrect use of the EAI, or fear of a bad outcome or death. Several predictors of parental fear were identified, including having a younger child and those with a shorter disease duration. In addition, their children were less likely to have experienced a severe reaction or to have required an EAI. With regard to parental characteristics, those who were characterized as having fear were slightly younger, had less satisfaction with EAI training, and were less likely to find the EAI easy to use. Factors associated with less fear included longer disease duration or older age of the mother.

**CONCLUSIONS.** This study found that a majority of parents have fear regarding use of the EAI. Factors that may predict fear include younger age of children, lack of severe reaction, and dissatisfaction with EAI training.

**REVIEWER COMMENTS.** This study is the largest to examine parental anxiety and fear regarding EAIs. The presence of parental fear could lead to delayed or lack of use in a severe allergic reaction, which is consistent with previous studies demonstrating low EAI use even in the face of severe reactions. Parents who were dissatisfied with their EAI training were more likely to express fear, highlighting the importance of appropriate EAI training by both prescribing physicians as well as others caring for children who have food allergies. This study was limited with regard to ethnic diversity, and the majority of parents were highly educated and employed.

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Anaphylaxis Knowledge and Practice Preference of Pediatric Emergency Medicine Physicians: A National Survey


**PURPOSE OF THE STUDY.** The goal of this study was to assess pediatric emergency medicine physicians’ knowledge and practice preferences for anaphylaxis.

**STUDY POPULATION.** A cross-sectional sample was used with participants recruited by using contact information obtained from the American Board of Pediatrics and the American Board of Medical Specialties. Participants were given a 12-item survey.

**METHODS.** A total of 1124 invitations were sent to the identified participants through SurveyMonkey. The survey included 12 questions covering demographic characteristics, physicians’ practices including medications preference, preferred route of epinephrine administration, duration of patient monitoring, discharge medications, prescription home with epinephrine autoinjectors, referral to specialists, and referral to educational Web sites. Emergency department settings were separated into university hospital, nonuniversity hospital with a residency training program, and community hospital with no residency training program. Data were collected by using the SurveyMonkey software.

**RESULTS.** Of the 1124 physicians, 56% responded, 3% opted out, and 0.9% no longer practiced medicine. The remaining did not respond. Overall, 93.5% correctly identified epinephrine as the treatment of choice for anaphylaxis but only 66.9% used the intramuscular route, which is the preferred method. Hospitals with residency programs had higher rates of intramuscular epinephrine use and higher volume of anaphylaxis cases, which in turn were associated with a decreased likelihood of admission for patients with anaphylaxis. In addition, 98.7% provided a prescription for an epinephrine autoinjector, 72.4% were referred to an allergy specialist, and 8.7% provided information to an educational Web site.
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Pediatrics 2014;134;S148
DOI: 10.1542/peds.2014-1817AA

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