perception of overall health (there were significant differences in additional subscale scores between those with FHS and those without any allergic disease). Even greater differences were observed for those with pronounced FHS and for those with high specific immunoglobulin E to foods. On the basis of the disease-specific questionnaire, parents reported significantly more feelings of sadness/restiction in everyday life and family conflicts for those with pronounced FHS compared with those with more mild or infrequent symptoms.

CONCLUSIONS. FHS had a significant impact on parentally reported HRQoL of 9-year-old children and their families.

REVIEWER COMMENTS. This study supports that there is a negative impact of adverse food reactions on perceived HRQoL. This unselected population may more accurately represent patients seen by pediatricians than populations used in previous QoL studies (tertiary care centers). The authors’ definition of FHS included a heterogeneous group of adverse food reactions (~40% not doctor diagnosed), but there was a significant negative impact on perceived HRQoL regardless of the etiology. It is interesting to note that the subjects with “physician-diagnosed food allergy” had significantly better scores in limitations in school or social activities resulting from emotional or behavioral problems and scored no worse than those without a diagnosis of food allergy on any subscale, which emphasizes the importance of appropriate management. The pediatrician plays a critical role in initiating the appropriate evaluation (eg, determining by history if there is a likely food allergy) and management (eg, avoidance instructions, prescription of self-injectable epinephrine, referral to an allergist, etc) that may improve HRQoL.

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The Natural History of IgE-Mediated Cow’s Milk Allergy

PURPOSE OF THE STUDY. Cow’s milk allergy (CMA) is generally reported to resolve in 85% of children by the age of 3 to 5 years. This study evaluated the rate of resolution of CMA in a food-allergy referral population with emphasis on factors predicting resolution.

STUDY POPULATION. Final selection of charts for review and abstraction were obtained from clinical records of 4117 patients seen by 1 of the authors over 14 years; 1368 patients had food allergy, and 1073 patients had CMA. After excluding non–immunoglobulin E (IgE)-mediated disease and fewer than 2 visits, 807 patients’ charts were reviewed.

METHODS. A retrospective chart review was conducted, and 3 definitions were applied regarding tolerance of cow’s milk. The strictest definition (1) was tolerating home introduction or a supervised food challenge, the second definition (2) included those with a milk-specific IgE level of <3 kU/L and no history of clinical reactions in 1 year, and the least stringent criteria (3) included a milk-specific IgE level of <15 kU/L and no history of clinical reactions in the preceding year.

RESULTS. When tolerance was defined by using the most stringent criteria, only 5% outgrew their allergy by 4 years of age, 21% by 8 years of age, 37% by 12 years of age, and 55% by 16 years of age. With criteria 2, the rates of resolution were 19% at 4 years of age, 42% by 8 years of age, 64% by 12 years of age, and 79% by 16 years of age. For the least stringent criteria (3), 26% were tolerant by 4 years of age, 56% by 8 years of age, 77% by 12 years of age, and 88% by 16 years of age. The higher the milk-specific IgE level noted per patient, the less likely was prompt resolution (P < .001). Coexisting asthma (P < .001) and allergic rhinitis (P < .001) were also significant predictors of delayed tolerance.

CONCLUSIONS. The prognosis for CMA in this population was worse than previously reported. However, some patients developed tolerance during adolescence, indicating that follow-up and reevaluation of patients with CMA is important in their care. Cow’s milk–specific IgE levels are highly predictive of outcome.

REVIEWER COMMENTS. It is depressing to see recent studies supporting a slower resolution of common food allergies (see also the following review on a study about egg allergy). However, the good news is that hope is not lost when an allergy persists into school age; these studies confirm that children may continue to “outgrow” allergies into adolescence and that repeated evaluations are helpful. It must be appreciated that this study represents a referral population that likely is enriched for children with a more persistent phenotype of milk allergy.


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The Natural History of Egg Allergy

PURPOSE OF THE STUDY. To estimate the proportion of children with egg allergy who develop egg tolerance and to identify predictors of tolerance development.

STUDY POPULATION. Subjects were 881 egg-allergic children identified by chart review from an academic allergy

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practice. Egg allergy was defined as a clear history of immunoglobulin E (IgE)-mediated allergic reaction to egg ingestion or an egg-specific IgE level of $\geq 2$ kU/L without known tolerance.

METHODS. Information was collected and included demographics, symptoms at egg-allergy diagnosis, presence of other atopic diseases and food allergies, dietary history, age/symptoms with egg exposure, egg skin-prick tests, egg-specific IgE, oral food challenge results, and outcome of egg and other food allergies. Three definitions were used to define oral tolerance to egg in all 881 subjects: definition 1 included those children who passed a formal oral food challenge or had successful home introduction of egg; definition 2 included children who met definition 1 and had an egg-specific IgE level of $< 2$ kU/L and no reaction within the previous year; and definition 3 included children who met definition 2 but had an egg-specific IgE level of $< 6$ kU/L.

RESULTS. Of the 881 subjects, the median age at the initial visit was 14 months, and median follow-up was 4.9 years with 68% male subjects. Most (93%) had at least 1 other food allergy, 54% had asthma, 55% had allergic rhinitis, and 81% had eczema. Of 881 subjects, 375 (43%) had a documented history of allergic reaction to rhinitis, and 81% had eczema. Of 881 subjects, 375 (43%) had a documented history of allergic reaction to rhinitis, and 81% had eczema. Of 881 subjects, 375 (43%) had a documented history of allergic reaction to rhinitis, and 81% had eczema.

CONCLUSIONS. This study supports the general idea that most children with egg allergy will eventually outgrow their allergy, but at an older age than previously implicated. Egg-specific IgE levels are predictive of tolerance development, and the presence of other atopic disease delays the process.
The Natural History of Egg Allergy
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