years, the number of episodes before diagnosis remained the same, indicating continued misdiagnosis. This, along with the inappropriate and sometimes risky treatments used in error, points out the need for greater awareness of the symptom pattern and triggers, especially rice, milk, and soy.

**Prospective Follow-up Oral Food Challenge in Food Protein-Induced Enterocolitis Syndrome**


**PURPOSE OF THE STUDY.** To determine tolerance rates to cow’s milk and soy for infants affected by food protein-induced enterocolitis syndrome (FPIES).

**STUDY POPULATION.** Twenty-three patients (7 female and 16 male) with infantile FPIES were prospectively followed.

**METHODS.** Infants with a diagnosis of FPIES were diagnosed by positive oral food challenges for milk or soy formula at 36 days of age (SD: 14 days; range: 13–58 days). These infants were prospectively followed until >2 years of age. They underwent ≥2 follow-up oral challenges. The first follow-up oral challenges were performed at 6 months of age, and patients were randomly allocated to either milk (N = 11) or soy (N = 12). Second and third follow-up oral challenges were performed at 2-month intervals in a crossed and switched-over manner. The challenge consisted of a single open oral feeding of 0.03 to 0.05 mg of cow’s milk protein or soy protein per kg of body weight.

**RESULTS.** Seventy-two oral food challenges with cow’s milk or soy were performed in 23 patients with FPIES. There were 27 positive challenges (37.5%). For all positive challenges, projectile vomiting and lethargy were noted at ~1 to 4.5 hours. Symptoms less commonly seen were cyanosis in 6 challenges (22.2%) and hypotension in 3 challenges (11.1%). No false-negative challenges were seen among the 45 negative challenges. Tolerance rates for milk at 6, 8, and 10 months of age were 27.3%, 41.7%, and 63.6%, respectively. Tolerance rates for soy at 6, 8, and 10 months of age were 75.0%, 90.9%, and 91.7%, respectively. Mean ages for outgrowing reactivity to cow’s milk and soy among the 23 patients were 12.0 months (SD: 4.4 months; range: 6–20 months) and 7.8 months (SD: 2.1 months; range: 6–14 months), respectively. Solid-food FPIES was observed in 2 of the patients (rice, beef, and egg in 1 child; >11 months of age and fish and shellfish in 1 child >12 months of age). These 2 children became tolerant to these foods after 2 years of age.

**CONCLUSIONS.** The study reveals that infants with FPIES lose tolerance to soy protein at an earlier age, compared with cow’s milk. The authors suggest that soy oral challenge should be performed at 6 to 8 months of age and that milk oral challenge should be conducted when the child is >1 year of age. Challenge should be conducted under close medical supervision. The authors also found that a smaller than previously published challenge dose (0.03 to 0.05 mg of cow’s milk or soy protein per kg of body weight) was adequate in inducing symptoms.

**Rice: A Common and Severe Cause of Food Protein-Induced Enterocolitis Syndrome**

Mehr SS, Kakakios AM, Kemp AS. *Arch Dis Child.* 2009; 94(3):220–223

**PURPOSE OF THE STUDY.** To examine the characteristics of children presenting with food protein-induced enterocolitis syndrome (FPIES) attributable to rice and to determine whether there were any differences from those presenting with cow’s milk and/or soy FPIES.

**STUDY POPULATION.** Retrospective study of 31 children presenting with FPIES (14 with rice and 17 with milk/soy) to the Children’s Hospital at Westmead, Australia, during a 16-year period (1992–2007).

**METHODS.** Possible cases of FPIES were identified from the hospital medical record database and from electronically stored departmental letters written by allergists/immunologists. Previously published criteria were used for the diagnosis of FPIES, and cases were differentiated into typical and atypical presentations. The Mann-Whitney U test or Student’s t test was used for comparisons between nonparametric and parametric continuous variables. P < .05 was considered significant.

**RESULTS.** There were 14 children with 26 episodes of rice FPIES, compared with 17 children with 30 episodes of cow’s milk (n = 10) and soy (n = 7) FPIES. Children with rice FPIES were more likely to have FPIES caused by another food (36%) than were children with FPIES caused by cow’s milk/soy (0%). Rice triggered more severe reactions, resulting in higher rates of intravenous
**Prospective Follow-up Oral Food Challenge in Food Protein-Induced Enterocolitis Syndrome**

Mary V. Lasley

*Pediatrics* 2009;124;S126

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