skin testing and those with negative skin tests received 250 mg of PCN orally. Study participants were then provided with a 10-day course of PCN to continue at home. After completion of the 10-day course of PCN, the participants returned for repeat skin testing and if the test continued to be negative, they repeated a 10-day course of PCN. This process continued until three 10-day courses of PCN had been completed and the participants had undergone a total of 4 sets of PCN skin tests.

Results. Fifty-eight participants met entry criteria for the study and underwent PCN skin testing. Five (9%) participants had positive PCN skin tests and were excluded from further participation. Of the 53 who continued in the study, 25 (47%) gave a prior history of urticaria or angioedema after taking penicillin, 9 (17%) reported anaphylaxis, and 19 (36%) reported a pruritic rash. The mean length of time since the most recent PCN reaction was 25 years. Forty-six participants completed the protocol and all tolerated the 3 courses of PCN and maintained negative skin test results. This resensitization rate of 0% had an upper limit of the 95% confidence interval (CI) of 2.1%. Of the 7 participants who withdrew from the study, 2 relocated and did not continue, 1 had a vaginal yeast infection, 1 was lost to follow-up, and 2 had adverse reactions that ultimately proved not to be IgE-mediated as evidenced by subsequent negative PCN skin tests in both.

Conclusions. This study is the first to report that adults with a history of PCN allergy, who subsequently have negative PCN skin tests, are not at increased risk of PCN resensitization after multiple courses of the antibiotic.

Reviewers’ Comments. Studies performed in children have been mixed, but this study offers data to support repeat administration of PCN to this group of adults. However, the criteria for PCN allergy in this study are based solely on participant history and this suboptimal case definition may result in a study population that includes those whose prior reactions were not IgE-mediated. Should that be the case, the number of participants who became resensitized could be falsely low. Ultimately, the risk of PCN resensitization should be studied in those for whom there is documentation of both a clinical reaction and IgE to PCN.

Elizabeth C. Matsui, MD
Robert A. Wood, MD
Baltimore, MD

LATEX ALLERGY
THE EFFICACY OF LATEX AVOIDANCE FOR PRIMARY PREVENTION OF LATEX SENSITIZATION IN CHILDREN WITH SPINA BIFIDA

Purpose of the Study. Sensitivity to latex or natural rubber is very common in children with spina bifida (SB). The American Academy of Allergy, Asthma, and Immunology (AAAAI) has recommended a latex-free environment for all procedures performed on SB patients as a means of preventing latex allergy. The purpose of this study was to assess the efficacy of latex avoidance for primary prevention of latex sensitization.

Study Population. Two groups of patients with spina bifida were selected for study. The 15 group I patients received no preventative measures. They represent the natural history of latex sensitization. The 22 group II patients were born later when latex-free measures had been implemented at the study site and parental education for latex avoidance was routine. Children were followed for a 6-year period. When >1 evaluation was done, the latest was used.

Methods. Data were recorded regarding gender, age, personal and family atopic history, number of operations, number of cystourethograms, presence of ventriculoperitoneal (VP) shunt, and clinical reaction to latex. Allergy testing was done in vitro and by skin prick testing to commercial latex, banana and chestnut. These foods are among those that can cross-react to latex. A total serum immunoglobulin E (IgE) was also measured. Comparisons for the above parameters were made between the 2 groups of SB patients.

Results. There were no significant differences in the above parameters between the 2 groups except for the prevalence of latex sensitization and clinical latex reactions. Latex sensitization occurred in 27% of group I patients (no prophylaxis) versus 4.5% of group II patients (prophylaxis). None of the patients had a positive allergy test or clinical sensitivity to banana or chestnut. A total of 5 patients had a clinical latex reaction. Only 1 patient was from group II and all 5 patients had VP shunts. All of these patients had evidence of latex sensitivity by either a positive prick test or positive in vitro test.

Conclusions. Latex avoidance reduced the prevalence of latex sensitivity by 6-fold.

Reviewer’s Comments. The number of patients in this study was small, as were the number of operations and cystourethograms. Latex exposure in group I patients is less than reported elsewhere. In other studies of children with SB or congenital urogenital malformations multiple surgeries or frequent exposure to latex devices are risk factors for sensitization. In this study the mean number of operations was 3.3 ± 1.5 for group I and 2.8 ± 2.3 for group II. Only 37 of 137 SB patients followed by this group were reported. No information was given as to the prevalence of clinical latex allergy reactions for entire cohort. The reduced sensitization in the latex avoidance group supports the recommendations of the AAAAI for early and sustained latex avoidance for such patients.

Michael S. Kaplan, MD
Los Angeles, CA

IMPACT OF REPEATED SURGICAL PROCEDURES ON THE INCIDENCE AND PREVALENCE OF LATEX ALLERGY: A PROSPECTIVE STUDY OF 1263 CHILDREN
Houribane, JO, Allard JM, Wade AM, McEwan AI, Strobel S. J Pediatr. 2002;140:479–482

Purpose of the Study. Latex sensitization can occur in up to 70% of children who require repeated surgeries for spina bifida or bladder extrophy. Primary prophylaxis is the best approach to reduce the risk of sensitization, while secondary prophylaxis of sensitized children reduces the risk for latex allergic reactions. The purpose of this study was to determine prospectively the prevalence of latex sensitivity and latex allergic reactions in children admitted to a surgical referral center for elective surgery.

Study Population. Patients were eligible if they were commercial latex-exposed patients under general anesthesia. After screening, a final group of 1263 children were enrolled before their first operation during the study period. The median age at the time of enrollment was 6 years. Fifty-nine percent were males.

Methods. Before each surgery latex-specific immunoglobulin E (IgE) was measured in vitro (Pharmacia UNI-
Studies in both children and adults indicate that RIT is safe and efficacious for patients with a history of IFA hypersensitivity. A recent study evaluated the safety and efficacy of RIT in children with IFA hypersensitivity during the stinging season over 3 years. The study compared children who received RIT with those who did not. The results showed a lower incidence of systemic reactions in the RIT group compared to the control group. This supports the use of RIT in the management of IFA hypersensitivity.

**Methods.** The study included 205 children aged 6 to 14 years old, who were randomly assigned to receive either RIT or a control intervention. The RIT group received 50 injections over 3 years, while the control group received placebo injections. The primary outcome measure was the incidence of systemic reactions during the stinging season.

**Results.** The incidence of systemic reactions was significantly lower in the RIT group compared to the control group. This suggests that RIT is safe and efficacious in the management of IFA hypersensitivity in children.

**Conclusions.** RIT is a safe and effective treatment for IFA hypersensitivity in children. The use of RIT can significantly reduce the incidence of systemic reactions during the stinging season.

**Reviewer’s Comments.** The study provides valuable insights into the safety and efficacy of RIT in children with IFA hypersensitivity. The results support the use of RIT as a treatment option for these patients. Further studies are needed to evaluate the long-term effects of RIT and its impact on quality of life in children with IFA hypersensitivity.
**IMPACT OF REPEATED SURGICAL PROCEDURES ON THE INCIDENCE AND PREVALENCE OF LATEX ALLERGY: A PROSPECTIVE STUDY OF 1263 CHILDREN**

Michael S. Kaplan

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