Nursing and Allied Health Abstracts

Title: CURRENT PREVALENCE OF LATEX SENSITIZATION IN CHILDREN WITH SPINA BIFIDA WITH USE OF LATEX PRECAUTIONS

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Background: Children with spina bifida (SB) historically have had high prevalence rates (up to 50%) of latex sensitization (allergy), believed due to repeated high-risk exposures including surgeries and catheterization. Since the association between SB and latex has been substantiated, most SB Centers have begun using latex avoidance measures with presumed lower rates of sensitization. The purpose of this study is to evaluate the prevalence of latex sensitization (IgE anti-latex positivity) in a population of children with SB that was born after the institution of latex precautions, and to assess associated risk factors for latex sensitization.

Method: Individuals with SB, age 0 to 18 years, are being recruited from a regional SB Center during routine clinic appointments. Study participants complete a latex allergy questionnaire regarding demographics, history of allergy, number of surgeries, and use of CIC. A blood sample is obtained for measurement of latex-specific IgE, total IgE, and two multi-allergen screens, one detects IgE antibody to 15 common aeroallergens (Phadiatop) and the other, IgE to the 5 foods (milk, egg, soy, wheat, and peanut) that cause most food sensitivities in children (FX5).

Results: N=66, mean age 7.9 years, range 0.1 to 17 years. Of the 66 patients tested, 14 (21%) tested positive for latex-specific IgE (>0.35 IU). Prevalence increased with age. Of those born before 1994, 44% were latex sensitized. Of those born after 1993, 14% were positive. Latex sensitization was associated with elevated total IgE, but was not statistically associated with positive Phadiatop, FX5, race, gender, number of surgeries, CIC, or history of atopy or food allergy.

Conclusion: The prevalence of latex sensitization has decreased substantially with the use of latex avoidance measures. The study may be underpowered to detect an actual relationship between latex sensitivity and some risk factors. We are continuing to analyze the data.