Latex Allergy and Dental Hygienists (1/06)


Oral health-care professionals have been shown to be at risk for developing a type I allergy to natural rubber latex (NRL). The objective of this study was to assess the prevalence of this allergy in dental hygienists. Participants attending the 2000-2002 American Dental Hygienists’ Association (ADHA) national meetings were screened for type I allergies to NRL using skin prick testing, symptom assessment, and health history. Participants were classified as positive for a type I NRL allergy based on their positive skin prick reactions to standardized NRL solutions. Risk factors and symptom assessments were based on a self-reported health history. Of the 582 ADHA participants who completed the screening and health history questionnaire, 4.8% (n=28) screened positive for a type I allergy to NRL (SPT-positive). These SPT-positive participants were significantly more likely to report an allergy to cross-reacting foods, plants, molds, and pollens, and to report reactions to rubber products. Participants screened SPT-positive were also significantly more likely to report a history of hives and respiratory symptoms after contact with natural rubber. Based on skin prick testing, the prevalence of a type I allergy to NRL in dental hygienists appears similar to that reported for other oral health care professionals and is greater than the general population. Educating dental hygienists about type I NRL allergy may help reduce prevalence and improve its management.

DECS Comment: This study confirms the trend that the overall prevalence of type I NRL hypersensitivity in medical and dental personnel is decreasing. It was interesting that the authors of this study noted that four times as many ADHA participants thought they had a “latex allergy” than were actually SPT-positive (19% vs. 4.8%). This belief was frequently based on non-specific itching or burning after contact with latex. However, skin reactions are not indicative of a type I NRL allergy. This illustrates the importance of obtaining an accurate diagnosis to prevent dental health-care personnel from mismanaging their occupational skin disease. Also, it was noted that the participants reported experiencing symptoms for an average of seven years before obtaining medical evaluation or treatment. This is consistent with other studies that indicate health-care worker’s skin disease can remain undiagnosed and poorly managed for an average of three years. This is of concern because chronically irritated skin can allow pathogen and allergen penetration. It has been documented that unmanaged skin disease has resulted in the transmission of hepatitis and HIV in a health-care worker. Education on maintaining healthy skin through proper hand hygiene and use of hand care products is essential because intact skin remains the primary barrier to pathogen transmission, abrasion, and chemical irritants. The diagnosis of a type I allergy to NRL should be based on both clinical test results and a detailed health history (e.g., medical and occupational history).