

Natural rubber latex allergens: new developments

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Purpose of review: New allergenic latex proteins have been identified, whereas further information on known latex allergens has emerged in recent years. Although prevalence figures for sensitization to the various latex allergens have been published in several studies in the past, the data have not been collated to facilitate cross comparison.

Recent findings: Salient characteristics of the three most recently identified latex allergens, Hev b11, 12 and 13 are described, whereas new findings on some of the previously recognized allergens are examined. Hev b 2 is viewed from the standpoint of allergenicity and protein glycosylation, Hev b 4 in relation to its biochemical identity and molecular cloning, Hev b 5 with respect to its recombinant form, and Hev b 6 in connection with conformational IgE epitopes. Reports on sensitization or allergic reaction to purified latex allergens from recent and past work are summarized. The use of latex allergens in latex allergy diagnostics is reviewed and discussed.

Summary: Thirteen latex allergens have been recognized by the International Union of Immunological Societies. Based on the results of published studies, native Hev b 2, recombinant Hev b5, native or recombinant Hev b 6, native Hev b13, and possibly native Hev b 4 are the major allergens relevant to latex-sensitized adults. Although there is an increasing tendency to identify and characterize latex allergens largely on the basis of their recombinant forms, not all such recombinant proteins have been fully validated against their native counterparts with respect to clinical significance.