

LATEX ALLERGY IN CHILDREN: MODALITIES AND PREVENTION

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BACKGROUND

Latex allergy is a type of allergic reaction caused by exposure to natural rubber latex, a substance obtained from the sap of the rubber tree. Latex allergy can cause a range of symptoms, from mild to severe, including skin rash, hives, runny nose, and difficulty breathing. In rare cases, latex allergy can lead to anaphylaxis, a life-threatening reaction that requires immediate medical attention.

In children, latex allergies or hypersensitivity have been reported with frequency depending on the subpopulations. The reported prevalence varies depending on the underlying conditions or ailments of the child and the methods used to detect sensitization. Children with certain underlying conditions, such as spina bifida, myelomeningocele, or multiple allergies, are at increased risk of latex allergies. This is because these children are more likely to be exposed to latex through medical procedures.



The most common symptoms of latex allergy are skin reactions, such as hives and itching. In severe cases, latex allergy can cause anaphylaxis, a life-threatening allergic reaction. There have been deaths related to latex anaphylactic shock during minor emergency procedures and other cases. There is no cure for latex allergy, but there are ways to prevent and manage it. The best way to prevent latex allergy is to avoid contact with latex.

The scope of this study aimed at evaluating the implementation of latex avoidance in an operating theatre in consequence of a latex anaphylactic shock and death of a child in a pediatric hospital.

OBJECTIVES AND METHODS



To review the prevalence, diagnosis, and prevention of latex allergy in children



To discuss the different methods that can be used to diagnose latex allergy, including skin prick testing and serum IgE testing



To discuss the different strategies that can be used to prevent latex allergy, including avoidance, immunotherapy, and premedication

RESULTS

A latex avoidance strategy was introduced and implemented in the pediatric hospital system in 2002. Surgical procedures that were performed over the next five years, of which there were over 25,000, saw no incidence of latex anaphylaxis. Healthcare workers (HCWs) and patients were included, and no latex anaphylaxis was recorded in them during these five years.

The authors of the study found that the prevalence of latex allergy in children varies depending on the population studied; however, it is estimated to be between 1% and 10%. They also found that children at increased risk for latex allergy include those with atopic dermatitis, spina bifida, and those who have undergone multiple surgeries.

It was also discovered that the additional cost of converting to a latex-free environment was offset by the elimination of allergen testing, reduced hospital stays for allergic events, and decreased worker compensation.

CONCLUSION

The authors concluded that the best way to prevent latex allergy is to avoid contact with latex. This can be accomplished by using latex-free products and informing healthcare providers of latex allergies. It is also important to have a plan in place in case of accidental exposure to latex. This plan should include a list of latex-free alternatives to common products, as well as a plan for emergency treatment in case of an allergic reaction. It is essential to have guides that provide insight into latex products and drugs. Latex allergy is an important medical issue, particularly for healthcare personnel and children receiving care.



Note: This clinical summary is written by clinicians at Ansell Healthcare Products LLC. Please refer to the actual study for full text information.

De Queiroz M, Combet S, Bérard J, et al. Latex allergy in children: modalities and prevention. *Paediatr Anaesth*. 2009;19(4):313-319.

To read the study article: <https://pubmed.ncbi.nlm.nih.gov/19335344/>

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