

Natural Latex Allergy: Strategies for Prevention

Based on recommendations by an interdisciplinary working party

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In the past 10 years the incidence and severity of immediate type reactions to latex products has increased rapidly. Symptoms range from contact urticaria through rhinitis, conjunctivitis and asthma to anaphylactic shock. Medical staff is mainly affected, but so are persons with atopy and those who undergo a large number of operations and other medical interventions. Thus up to 18 % staff in surgical units and more than 50 % of the children with spina bifida are sensitized. About 18 % of perioperative anaphylactic reactions are attributable to IgE-mediated allergy to latex. The reason for this dramatic development is the use of allergen-rich medical equipment, especially rubber gloves made from natural latex. The allergy tests currently available allow rapid and reliable diagnoses to be made. The following recommendations are intended to help to avoid such allergies and to achieve wide acceptance of preventive measures. They are intended for legislators, the manufactures of rubber goods, hospital authorities, the owners of medical practices, insurance institutions, health service workers and patients who already have an allergy to natural latex.

Recommendations for legislators and the manufactures of rubber products

- Since rubber goods cannot be guaranteed allergen-free, it is considered essential for all medical devices containing latex to be labeled "Contains natural latex".

- In addition, the protein and allergen content and the methods of extraction and determination (immunoblot) used should be specified on the packaging. Details of the processes used should be available on request, to ensure comparability.

- The term "hypoallergenic" must be deleted, since it is not defined and may give consumers a false sense of security.

- No more allergen-rich latex products should be made or marketed. A maximum allergen content of 10 µg per gram of latex is currently under discussion.

Recommendations concerning provisions on the use of latex products in hospitals and nursing homes and in medical and dental practices

- To avoid allergic reactions in patients and employees who are already sensitized to latex and to rule out new instances of sensitization in the above-mentioned risk groups, only gloves with a low latex allergen content and preferable non-powdered or allergenfree gloves should be used in the health service. It is also thought that powdered latex gloves should be withdrawn from the market.

- Practice owners and hospital institutions must ensure that patients who are allergic to latex can be examined and treated without risk. This applies in particular to emergency departments

and surgical units. Operations on these patients should be performed in operating suites free from latex allergens.

- In accordance with 2.1 and 2.2, "accident prevention rules", "technical rules for hazardous substances natural latex" or "other binding provisions should be adopted".

Recommendations for staff in the health service (medical practice, hospital), especially nursing staff, dentists, anesthetists and doctors performing operations

Primary and secondary preventive measures are needed to protect medical staff against latex allergy which affects 3 - 18 % of people employed in these occupational groups.

• Primary prevention

It is essential to prevent the considerable cutaneous and aerogenic exposure which has previously existed in most areas of the health service. The use of allergen-rich powdered latex gloves no longer meets modern occupational safety and hygiene requirements. Every doctor's practice, every hospital and every nursing home should produce a recommendation specifying which gloves are required for which activities. Safe alternatives are available. Employees with known atopy should ensure that they avoid contact with items containing natural latex. Alternatively, they can wear low-protein, unpowdered gloves. The same applies to patients with hand dermatitis.

• Secondary prevention

To protect persons who are already sensitized and to allow them to go on working, the following action must be taken at the work:

- Persons allergic to latex must be provided with allergenfree equipment, especially gloves
- Because of the risk of exposure through inhalation, no powdered latex products may be used in the working environment of a person allergic to latex.

- For the protection of patients who require treatment and are allergic to latex, only latex-free equipment must be used for diagnostic tests, treatment and nursing care.

- To prevent high-risk groups (e.g. patients with spina bifida or urogenital malformations) from becoming sensitized to latex, it is necessary to ensure that diagnostic tests, treatment and nursing care are performed using latex-free products. Areas with contaminated air must be avoided.

- Allergologists, dermatologists, general physicians, surgeons, pediatricians, urologists, anesthetists, dentists, gynaecologists, obstetricians and radiologists should as a matter of routine ask their patients whether they are allergic to natural latex before every examination or procedure. The groups of patients at increased risk include health service employees and workers in the rubber processing industry, patients who have already undergone many operations, those with spina bifida, urogenital malformations and existing atopic conditions and persons who have frequent contact with gloves made from latex. In these high-risk group or where there is a history of latex allergy, diagnostic tests should be performed by an allergologist. This applies in particular to preoperative preparation.

Recommendations for patients suffering from manifest natural latex allergy:

- Patients who have an immediate type reaction to latex should be issued with an allergy pass giving the appropriate information, or better still an emergency bracelet. They must consistently avoid contact with materials containing latex. Patients who have been found to be sensitized but who have not yet had any allergic reactions are advised to take the same action even though there are to date no studies on the course of such sensitization.

- In some patients the allergy to latex is associated with a cross hypersensitivity to foods such as banana, avocado, kiwi and/or chestnut.

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