



Latex allergy – A neglected hazard of COVID-19 response

Dear editor,

Latex allergy (LA) is a common occupational issue among health care workers, with a sensitization rate of 5–17% among the exposed. Although the incidence of LA has decreased dramatically in the United States and Europe over the past few years, 150,000–1 million health care workers and more than 15 million people worldwide still suffer from LA.^[1]

LA represents a challenging public health concern in the developing countries due to the high production of latex-based products; even though, very little attention has been paid to synthesize evidence on the burden of LA and potential risk groups.^[2,3] During the COVID-19 pandemic, latex and nitrile gloves were preferred over vinyl and polyethylene gloves due to their higher durability as a part of biosafety measures.^[4] This has expanded the interest for manufacturers to create and produce latex gloves. This increased demand for latex gloves might have incidentally changed assembling systems, which thusly might have brought about low quality, profoundly allergenic items. As in many low-middle-income countries, there is a lack of preventive measures and need effective changes in policies and behaviors to be carried out at health-care facilities.^[5] Presentation to latex through intimate contact with the skin or inward breath of airborne particles from powdered gloves represents a risk for both medical practitioners and patients. Furthermore, these hazards increase with prolonged and repeated exposure.

Latex sensitization has gotten to be a progressively common problem within the dental practice, detrimental effects of latex vary from slight contact dermatitis to severe fatal conditions of urticaria, flushing, severe bronchospasm, increased vascular permeability with edema, and anaphylaxis.^[6] Clinical and dental professionals pose the highest percentage of these serious reactions. A cross-sectional study was done by utilizing a survey and sensitivity skin prick testing to determine the prevalence of latex sensitivity among members of a faculty of dentistry. Of the 203 who completed the survey, 5% reported respiratory problems on exposure to rubber items, 13% revealed inflammatory side effects such as conjunctivitis and rhinitis, and 17% had pruritus or urticaria after few minutes of exposure to natural rubber latex (NRL).^[7]

Concerning patients, children with spina bifida are among the groups with high risk to LA. Recent reviews estimate that the prevalence of LA in these patients might be as high as 67%.^[8] Up to 64% of patients who have had various surgical interventions because of inborn urogenital anomalies are

allergic to rubber, and a lot of these have experienced serious, even fatal reactions.^[9] Patients who have an allergy to some food substances such as banana, chestnut, kiwi, and avocado are found to have some cross-reactivity. All of these food types have antigens similar to those found in the latex, thus being designated as “Latex Fruit Syndrome.”^[3]

The basic diagnostic test for LA is skin prick testing in patients who have localized symptoms. Individuals with systemic symptoms need more specific investigations like latex-specific IgE antibody tests. Other basic diagnostic tests of latex allergies including wear/use test and patch test.^[10]

In the last few years, a significant increase in sensitization to NRL has been recorded. Right now, prevention is the only effective treatment for LA. Powdered latex should be avoided as possible to create a “latex-safe environment.” Health care workers should be able to identify LA as early as possible to reduce any associated morbidity.^[1]

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