An Official Publication of Society of Pharmacovigilance, India.

A Case Series of Contact Irritant Dermatitis due to Latex Gloves: An Implication of Materiovigilance

Case Series

Ahmad Najmi[1], Shilpa Kaore[2], Balakrishnan S[3], Mohammad Faizan Khan[4]

[1]Associate Professor,[2]Additional Professor,[3]Professor & Head, Dept. of Pharmacology,[4]Materiovigilance Research Associate, Regional Training Centre, Materiovigilance, AIIMS Bhopal

ABSTRACT

Most common reaction to latex products is irritant contact dermatitis caused by irritation from wearing gloves or by glove powder. Latex glove reactions have been shown to be an important cause of occupational morbidity among healthcare professionals because they use latex gloves on a frequent basis. In this case series we reported seven cases of irritant contact dermatitis due to the use of latex gloves. On using nitrile gloves, these symptoms subsided. There was no history of any drug allergy or eczema among these nursing staff. The causality category was probable as per WHO causality scale. These cases were reported to regional training centre materiovigilance under materiovigilance program of India.

Keywords: *Latex allergy; Irritant dermatitis; Materiovigilance programme of India.*

How to cite this article: Ahmad Najmi *et al*; A Case Series of Contact Irritant Dermatitis due to Latex Gloves: An Implication of Materiovigilance, J Pharmacovig Drug Safety, 2024;21(2):6-7.

Source of Support: Nil, **Conflict of Interest:** None

Received: 26.10.24
Accepted: 02.12.24

Corresponding Author

Dr. Ahmad Najmi,
Associate Professor,
Dept. of Pharmacology,
AIIMS Bhopal
E mail:
ahmad.pharm@aiimsbhopal.edu.in
M.N. 9695140451

Copyright: *© the author(s) and publisher. JPDS is an official publication of* ***Society of Pharmacovigilance, India.***

This is an open access article distributed in accordance with the Creative Commons Attribution Non-Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is non-commercial.

INTRODUCTION

Latex allergy is a reaction to certain proteins present in latex, which manifests as an allergic reaction or as a result of chemicals added to latex which then manifests as allergic contact dermatitis. However, the most common reaction to latex products is irritant contact dermatitis caused by irritation from wearing gloves or by glove powder.[1] of extracellular matrix material in the trabecular meshwork, increasing outflow resistance and subsequently elevating IOP.[2\]Latex glove reactions have been shown to be an important cause of occupational morbidity among healthcare professionals because they use latex gloves on a frequent basis. Primary prevention of occupational latex allergies, such as early recognition, health education, and switching to powder free nitrile gloves with reduced protein content, has been associated with a decline in the number of these cases.[2] Secondary prevention of latex allergies is done by supplying the allergic workers with latex free gloves and reduction of exposure, which results in fewer socioeconomic consequences.[3]

Access this article online	
Website: www.journalofsopi.com	For Reprints
DOI: 10.21276/jpds.2024.21.02.02	Contact at editorjournalsopi@gmail.com

CASE DISCUSSION

We reported seven cases of contact dermatitis from nursing staff of AIIMS Bhopal hospital in November 2024. Nursing staff reported dryness of skin, itching, cracking of skin, cuts in skin, skin irritation. They also reported excessive powder which leads to absorption of moisture and sebum from the skin which leads to dryness and skin cracks *(Figure 1 & 2)*.

Figure 1

Figure 2

On using nitrile gloves, these symptoms subsided, there was no history of any drug allergy or eczema among these nursing staff. The causality category was probable as per WHO causality scale.

Under Materiovigilance Program of India (MvPI), medical device adverse events due to masks,gloves, sanitizers and PPE kits can be reported by a separate medical device adverse event form specially designed for PPE kits.[4] Department of Pharmacology, AIIMS Bhopal is a regional training centre for Materiovigilance under MvPI. Causality and route cause analysis was performed by Materiovigilance expert committee (MEC).

Materiovigilance expert committee is composed of chairman, coordinator, deputy-coordinator, biomedical engineer, nursing officer & subject experts. Under MvPI, any adverse events due to medical device can be reported to nearest medical device monitoring centres or regional training centres of materiovigilance. For Materiovigilance Programme of India (MvPI), Indian Pharmacopoeia Commission (IPC) Ghaziabad is a National Coordination Centre (NCC). Sree Chitra Tirunal Institute for Medical Sciences & Technology (SCTIMST), Thiruvananthapuram is working as National Collaboration Centre. National Health System Resource Centre (NHSRC), New Delhi, is working as technical support partner and Central Drugs Standards regulatory agency.

CONCLUSION

This case series emphasizes the reporting of contact dermatitis due to latex gloves under materiovigilance program of India. Under materiovigilance program of India (MvPI) separate dedicated form is available for reporting of medical device adverse events due to PPE kits. Proper history of drug and latex allergies should be taken from healthcare professionals at the time of their employment. Primary & secondary prevention methods should be adopted to decrease the risk of this occupational morbidity among healthcare professionals. Proper reporting of such adverse events under materiovigilance program of India can improve the quality of healthcare and patient safety.

REFERENCE

1. National Institute for Occupational Safety and Health. Latex allergy a prevention guide; 1998. NIOSH Publication No. 98-113. Available from: https://www.cdc.gov/niosh/docs/98-113.
2. Allmers H, Schmengler J, Skudlik C. Primary prevention of natural rubber latex allergy in the German health care system through education and intervention. J Allergy Clin Immunol 2002;110:318-23.
3. Vandenplas O, Jamart J, Delwiche JP, Evrard G, Larbanois A. Occupational asthma caused by natural rubber latex: Outcome according to cessation or reduction of exposure. J Allergy Clin Immunol 2002;109:125-30.
4. Najmi A, Kaore S, Ray A, Sadasivam B. Use of handheld infrared thermometers in COVID-19 pandemic for mass screening: Understanding its implications through a case report. Journal of Family Medicine and Primary care