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CLINICAL SUMMARY

A STUDY OF CONTACT DERMATITIS AMONG OPERATING THEATRE HEALTH PERSONNEL FOLLOWING THE BAN OF POWDERED LATEX GLOVES

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BACKGROUND

Contact dermatitis resulting from glove use is a common occupational disease. It has been described to be multi-factorial and associated with occupational morbidity, loss of days from work, and impacted the quality of life of affected individuals.

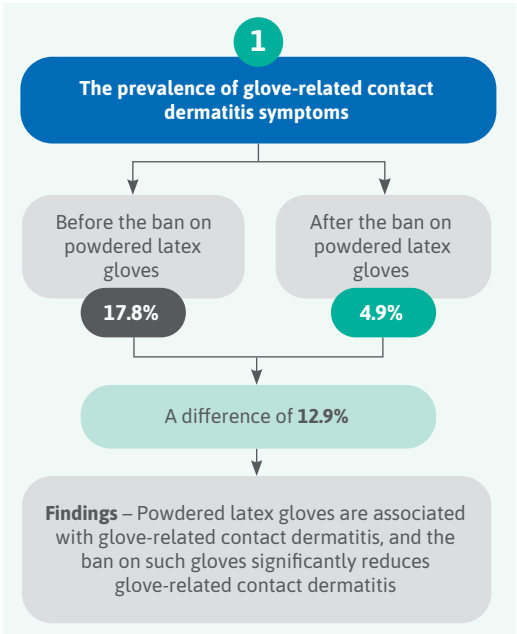
Cornstarch powder which is associated with glove manufacturing is one of the significant contributors identified to exacerbate both allergic and irritant contact dermatitis in susceptible individuals. Therefore, removing powder-containing gloves could decrease the incidence of glove-related skin dermatitis.

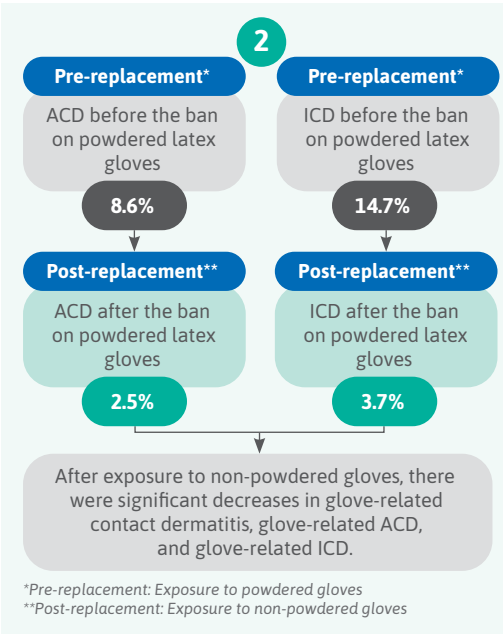
OBJECTIVES AND METHODS

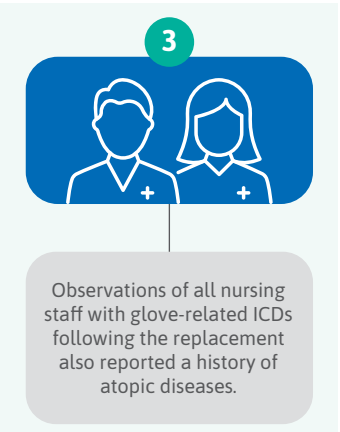
This quasi-experimental study aimed to examine the decline of glove-related contact dermatitis following a three-month ban on powdered latex gloves. The nursing staff used synthetic rubber and non-powdered latex gloves during this time.

The 212 operating room nursing staff participants from a university hospital in Northern Thailand were asked to complete a self-administered questionnaire. It included detailed demographics, skin conditions, and latex-related symptoms. They wore three pairs of low-allergenic latex gloves per day, and participants using powdered latex gloves in other settings were excluded.

RESULTS







CONCLUSION

The results showed that glove-related dermatitis, including ICD and ACD significantly decreased after removing powdered latex gloves.

Before the prohibition of powdered latex gloves (pre-replacement), glove-related ACD and ICD were reported at 8.6% and 14.7% respectively. After the ban on powdered latex gloves (post-replacement), ACD and ICD measured 2.5% and 3.7% respectively. The study substantially contributed to reducing glove-related dermatitis issues, such as a decrease in HCW glove-related ACD and latex allergy,[1] which aligns with other studies.

Switching to powder-free can have positive benefits if applied as a permanent solution. The authors further recommended establishing a powder-free policy to reduce glove-related contact dermatitis among nursing staff. Thus, exploring the outcomes of replacing powdered latex gloves in Thailand and where powdered medical gloves are still in use, is the first step.

APPLICATION FOR PRACTICE

1

Glove-related contact dermatitis is categorized as either allergic contact dermatitis (ACD) or irritant contact dermatitis (ICD)

2

Establishing powder-free gloves, including non-latex options is key for reducing skin dermatitis

3

Prevention and early intervention of OCD are vital in promoting occupational health and safety

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

Ngamchokwathana C, Chaiear N, Sakdapipanich J, Wongratanacheewin S, Dechyotin S, Sripramai S, Khajornpipat P. A study of contact dermatitis among operating theatre health personnel following the ban of powdered latex gloves J Med Health Sci, August 2022, 29 (2) 33-42.
To read the study article: https://he01.tci-thaijo.org/index.php/jmhs/article/view/258403.

Reference:

1. *Turner S, McNamee R, Agius R, Wilkinson SM, Carder M, Stocks SJ. Evaluating interventions aimed at reducing occupational exposure to latex and rubber glove allergens. Occup Environ Med. 2012;69(12):925-931.*

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