

Prevalence and factors associated with sensitivity to methylisothiazolinone in individuals with suspected allergic contact dermatitis: Comment

Prevalencia y factores asociados con la sensibilidad a la metilisotiazolinona en individuos con sospecha de dermatitis alérgica por contacto: un estudio transversal: Comentario

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Dear Editor, we would like to comment on the publication on "Prevalence and factors associated with sensitivity to methylisothiazolinone in individuals with suspected allergic contact dermatitis: A cross-sectional study¹." This study sheds light on the amount of methylisothiazolinone (MI) sensitization in a cohort of probable allergic contact dermatitis (ACD) patients from Brasilia, Brazil. The findings revealed that 13.6% of participants were prone to MI, with women having a greater prevalence (71.8%) and an average age of 43.7 years. The study also discovered that household activities were a significant risk factor, raising the chance of MI by 4.2 times. Furthermore, in this investigation, the most prevalent sites of dermatitis were the hands (76.9%) and extremities (33.3%), both of which are expected to be regularly exposed to MI-containing household goods. It is hypothesized that these results add to the expanding corpus of research on the rising incidence of MI-related sensitization, particularly in areas with high usage of MI-containing items. Some areas of this study, meanwhile, require more research.

First, while the study methodology was useful in determining the prevalence of MI sensitization, it was cross-sectional, which limited causal inferences. Longitudinal investigations could provide a better understanding of how MI sensitization and exposure patterns evolve over time. Furthermore, the study did not distinguish between the many types of goods that may lead to MI sensitization, despite the fact

that home exposures have been identified as a substantial risk factor. However, the individual products (e.g., cosmetics, cleaning products, and personal care products) have not been thoroughly researched. Understanding the risk of exposure to these products allows for more targeted prevention and education initiatives. Furthermore, this study did not evaluate whether participants with MI sensitization behaved differently depending on the amount or length of exposure, which could help improve risk assessment.

The focus on home exposures distinguishes this study from others. This has not been consistently emphasized in earlier research. The findings show that household members may be at a higher risk due to regular exposure to MI-containing items. Future research could expand on this by investigating specific home goods and potential cross-sensitivity to other prevalent allergens. Furthermore, more specific demographic data, such as work, lifestyle characteristics, and geographic variances, could aid in the identification of subgroups at risk for more targeted preventative actions.

In conclusion, this study offers critical baseline data on the prevalence of MI sensitization and its associated characteristics, which could have ramifications for public health policy and consumer product regulation. However, the exact sources of MI exposure and the long-term consequences of such sensitization warrant more exploration. Future cohort studies, paired with more comprehensive exposure data, could help us comprehend this emerging public health risk.

DECLARATIONS

Declaration of conflicts of interest

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Ethical responsibilities

No experimental procedures will be performed in this study, nor will personal data be disclosed. The patient authorized, through informed consent, the taking of images and the description of the clinical case for publication for academic and research purposes.

Authors' contributions

HP 50% ideas, writing, analyzing, approval.

VW 50% ideas, supervision, approval.

Declaration of human and animal rights

This article does not contain any studies involving human or animal subjects conducted by any of the authors.

Reference key

1. Belluco PES, Birolim MM, Ferreira MD, Belluco JEF, et al. Prevalence and factors associated with sensitivity to methylisothiazolinone in individuals with suspected allergic contact dermatitis: A cross-sectional study. *Rev Alerg Mex.* 2024 Dec 23;71(4):234-241.

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REFERENCE

1. Belluco PES, Birolim MM, Ferreira MD, Belluco JEF, et al. Prevalence and factors associated with sensitivity to methylisothiazolinone in individuals with suspected allergic contact dermatitis: A cross-sectional study. *Rev Alerg Mex.* 2024; 71(4): 234-241.