

Case Report: Nosocomial Digital Eczema from Surface Cleansing Bleach

James Espinosa^{1,*}, Umar Sannoh², Alan Lucerna³, Joseph Pagano¹

¹Department of Emergency Medicine, Jefferson Health, NJ - Stratford, NJ, USA

²Rowan-Virtua, SOM, Medical School, Stratford, NJ, USA

³Program Director, Emergency Medicine Residency, Jefferson Health New Jersey, Stratford, NJ, USA

ABSTRACT

We report the case of a healthcare provider who developed hand eczema, predominantly on the first digit and thumb of the right hand, in association with contact with the surface of a desk and contact with a computer mouse at work. The eczema abated on days off and was exacerbated within hours of work. The diagnosis was made of hand eczema from surface cleaning bleach. It was noted that several other healthcare providers had developed similar symptoms. The patient's eczema was confirmed by a dermatologist and was successfully treated with topical triamcinolone and emollient cream to the affected areas. Prevention by adhesive strip band aids to the affected areas of the hand as well as water cleansing to previously bleach-cleansed surfaces has been helpful.

Keywords: Nosocomial digital eczema, digital eczema, eczema from surface cleaning bleach

CASE PRESENTATION

We report the case of a healthcare provider who developed hand eczema, predominantly on the first digit and thumb of the right hand, in association with contact with a desk and mouse pad at work. The healthcare worker used soap and water cleansing of the hands and so hand sanitizer exposure was not an issue. The eczema abated on days off and was exacerbated within hours of work. The diagnosis was made of hand eczema from surface cleaning bleach. It was noted that several other healthcare providers had developed similar symptoms. The patient's eczema was treated with topical triamcinolone and emollient cream to the affected areas for several hours at night using a non-vinyl glove. Prevention included wiping the desk area, mouse and keyboard with water-soaked pads prior to use.

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*Corresponding Author

James Espinosa MD

Department of Emergency Medicine, Rowan University SOM Kennedy University Hospital, 18 East Laurel Road, Stratford, NJ 08084, USA

E-mail: jim010@aol.com

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Figure 1: Affected area of hand.

DISCUSSION

The case presented represents an example of an occupationally-related dermatological condition from chemical exposures.

According to Anderson, there are three types of occupationally related chemical skin exposures: [1]

- 1) Direct skin effect
- 2) Immune mediated effect
- 3) Systemic effects

Surface cleaning bleach has been described as a direct skin effect exposure occupational irritant [1]. Another direct skin exposure agent that has been described as related to hand eczema in some healthcare workers is hand sanitizer [2,3]. In the case presented, the healthcare worker used soap and water cleansing of the hands.

Hand eczema of all types has been on the increase worldwide since late 2019, with the suggestion that this may be related to COVID-19 due to an associated increased use of strong surface cleansers as well as increased use of hand sanitizer [4-7].

Treatment includes standard eczema cream, moisturizer and reduction of contact with the surface bleach [8]

CONCLUSION

Hand eczema of all types has been on the increase worldwide since late 2019, with the suggestion that this may be related to COVID-19 due to an associated increased use of strong surface cleansers as well as increased use of hand sanitizer. Here we report the case of a healthcare provider who developed hand eczema, predominantly on the first digit and thumb of the right hand, in association with contact with a desk surface and use of a computer mouse at work. The healthcare worker used soap and water cleansing of the hands and so hand sanitizer exposure was not an issue. The eczema abated on days off and was exacerbated within hours of work. The diagnosis was made of hand eczema from surface cleaning bleach. It was noted that several other healthcare providers had developed similar symptoms. The patient's eczema was treated with topical triamcinolone and emollient cream to the affected areas for several hours at night using a non-vinyl glove. Prevention included wiping the desk area, mouse and keyboard with water-soaked pads prior to use.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

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