

Short Communication

Latex glove facial allergic contact dermatitis without hand manifestations

JUDY W. NG AND HOWARD I. MAIBACH

Department of Dermatology, University of California, San Francisco, San Francisco, CA 94143, USA

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Case Report

A 56-year-old woman, with no personal or family history of atopy, had a pruritic facial eruption that had been present intermittently for the past 16 months. She had been a phlebotomist for the past 20 years and had worked as a supervisor until approximately 18 months ago, when she had started to wear latex gloves regularly. From that time, she began to develop a pruritic rash on her face, neck, and chest that also had a burning quality. The lesions would develop in the evening after she had worn latex gloves throughout the day and would improve at weekends and on vacation. She denied ever having had any lesions on the hands. She reported that she felt sick and weak when she had the lesions on her face, but denied having any respiratory or intra-oral symptoms. She had no known drug allergies though was taking thyroxine, conjugated estrogen cream, ranitidine, and cyclobenzaprine. Prior to her referral to us, a patch test had been done with 4 types of gloves, 2 of which were latex. At 2 days, her patch tests were negative, but she had developed feelings of shakiness and weakness, as well as erythema and pruritus around her face, neck, and chest.

She was patch tested utilizing standard methodology with an extended standard series and latex and vinyl gloves. Readings were made at days (D) 2 and 4. At D2, she reported feeling sick and weak, and complained of a headache that had been present for more than 1 day. She had also developed extensive pruritic erythematous papules on her face and neck, though did not have any lesions on her arms or hands. At D4, her arms and hands remained clear, but the pruritic papules had spread to her upper chest and her facial and neck lesions had worsened with the development of erythematous plaques that covered her face. Her patch tests were positive (D2; D4) to thiuram (++; ++), thimerosal (++;

++) and latex gloves (+; ++), but negative to the remainder of the series and to vinyl gloves. A use test with her latex gloves, and a prick test (2.5×2.5 cm extract of a standard positive glove in 1 ml of physiologic saline) were negative.

Comment

Type-IV hypersensitivity reactions to latex gloves usually occur as a reaction to rubber additives (thiurams, mercaptobenzothiazole, carbamates) and present as papules and vesicles with erythema and sometimes edema at sites of direct contact with latex, most frequently on the hands. An exception is the report of facial irritation and itchy eyes and nose without involvement of the hands in a survey reported by Wrangsjö et al. (1). Our patient developed a pruritic and erythematous eruption only on her face and neck and not on her hands. This is an uncommon presentation, but can occur. It is not known why the lesions did not develop on the hands and we do not know the cause of her extracutaneous symptoms. A similar case of facial involvement without hand involvement was reported by Tan et al. (2) in a mechanic who developed latex contact urticaria. Thus, both Type-I and Type-IV hypersensitivity reactions can occur exclusively in regions distant from the site of direct exposure to rubber latex.

References

1. Wrangsjö K, Osterman K, Van Hage-Hamsten M. Glove-related skin symptoms among operating theatre and dental care personnel (I). *Contact Dermatitis* 1994; 30: 102-107.
2. Tan B B, Lear L T, English J S C. Latex contact urticaria presenting as facial swelling in a motor mechanic. *Contact Dermatitis* 1997; 36: 229-230.