

Nickel by proxy

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CASE REPORT

A 27-year-old Caucasian woman presented with annular dermatitis on the flexor aspect of her right wrist. She had originally developed dermatitis on her left wrist, which she thought was attributable to an allergic reaction to a metal watch and watch strap that she had recently acquired. Moreover, a history of severe reactions to earrings was noted. When she wore the watch on her right wrist, she subsequently developed localized dermatitis. Although she stopped wearing the metal watch, the annular dermatitis on her right wrist persisted. This flared, and would resolve with topical steroid therapy, but then return. Mycological investigations gave negative results, and fixed drug eruption was excluded by examination of the patient's history. She insisted that she had not worn any metal straps or bracelets on this wrist. Patch testing with baseline, fragrance and clothing dye series showed a +++ reaction to nickel only.

On further questioning, it transpired that she would go to the cinema with her boyfriend approximately twice monthly and hold hands while watching the movie. Her boyfriend wore a signature watch on his left hand, and the watch would make contact with the patient's wrist on the area matching the site of eczema. The watch buckle was strongly positive on dimethylglyoxime testing, in keeping with significant nickel release. When her boyfriend stopped wearing the watch, her dermatitis resolved.

DISCUSSION

There are six potential routes of exposure to contact allergens that may result in allergic dermatitis. By far, the commonest route for allergic contact dermatitis (ACD) caused by nickel is through direct contact, for example, from wearing jewellery. Occasional cases of airborne ACD caused by nickel have been reported in certain occupational settings in which there is exposure to metal fumes.¹⁻³ Although, to our knowledge, there have been no definitive case reports of ACD caused by nickel resulting from transmission from the hands to the face/neck, it has been shown that transmission of nickel from the hands to the face in quantities sufficient to cause ACD can occur within a normal setting.⁴ Mucosal exposure within a dental setting has

been reported,^{5,6} as has dietary exposure to nickel causing systemic allergic dermatitis.⁷ To our knowledge, this is the first case of ACD caused by nickel through "by proxy" exposure. As with other cases of "by proxy" contact dermatitis, the presentation is often bizarre and not evident, the dermatitis is asymmetrical, and the underlying contact allergy is marked.⁸

CONFLICTS OF INTEREST

The authors have no conflicts of interest to report.

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