

Short Communication

Localized erythema-multiforme-like contact dermatitis from rubber gloves

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Key words: rubber gloves; erythema-multiforme-like contact eruption; allergic contact dermatitis. © Munksgaard, 2001.

Case Report

A 48-year-old non-atopic woman presented with severely itchy, erythematous, urticarial papules and plaques on both hands and forearms, 1 month after using rubber gloves of a new brand. 2 days after onset of the rash,

the lesions became target-like and dusky-centered, mimicking erythema-multiforme morphologically (Figs. 1a, b). All lesions were within the region covered by the gloves. Neither contiguous spread nor secondary dissemination were noted. Patch tests were negative with the revised European standard series, but positive to the



Fig. 1. (a) Skin lesions on the areas covered by rubber gloves; (b) EM-like eruption.

Table 1. Contact allergens causing erythema-multiforme-like (urticarial papular and plaque) eruptions

Allergens	Primary site	Localized/ spread/diffuse	Case no.	Ref.
budesonide	1. face & hands, 2. upper limbs & trunk	S and D	2	CD [#] 1996: 34: 154
bufexamac	1. lower leg, 2. elbows, 3. buttocks, 4. legs	D	4	CD 1994: 31: 97–101
capsicum	knee	D	1	CD 1995: 33: 353–354
cocobolo	arm	D	1	AJCD* 2000: 11: 235–237
colophonium, paratertiary-butylphenol- formaldehyde resin, Disperse Blue 124	feet	S	1	AJCD 1994: 5: 90–93
cutting oil	hands & forearms	S	1	EJD [‡] 2001: 11: 247–248
dimethoate	hands & wrist	D	1	CD 1992: 27: 116–117
hair lotion	hairline	L	4	AJCD 1994: 5: 90–92
<i>Hypericum erectum</i>	buttocks	S	1	CD 1990: 23: 202–203
paraphenylenediamine- paratoluenediamine sulfate	scalp & face	S	1	AJCD* 1994: 5: 90–93
phenylbutazone	presternal chest	S	1	CD 1995: 33: 213
povidone-iodine	NA	S	1	CD 1990: 23: 202–203
povidone-iodine, thimerosal	vulva	S	1	AJCD 1994: 5: 90–93
rubber	hands & forearms	L	1	present case
rubber latex	hands & forearms	S	1	CD 1996: 35: 55–56
sesquiterpene lactone	presternal, intermammary	S	1	CD 1995: 33: 449
tea tree oil (essential oil)	leg	S	1	AJCD 2000: 11: 238–242
textile dyes	thighs, face & neck	S	2	CD 1991: 24: 253–258

[#]CD: Contact Dermatitis; ^{*}AJCD: American Journal of Contact Dermatitis; [‡]EJD: European Journal of Dermatology.
NA: not available; D: diffuse; L: localized; S: spreading.

inner side of the new gloves at D5. This patient, however, refused to have further patch tests or skin biopsy.

Discussion

Unlike erythema multiforme (EM), the EM-like contact eruption does not have symmetrically acral distribution or characteristic histology (1, 2), and rarely involves the oral mucosa. In general, it is considered to be an id-like reaction occurring with powerful sensitization, penetration-enhancing substances, high concentrations or repeated application of allergens (3, 4). Fisher (5) has reviewed the allergens reported and we have listed recently reported cases in Table 1.

Bourrain et al. (6) reported the first EM-like contact eruption caused by rubber gloves, with distant spread of lesions. Here, we report a 2nd case caused by rubber gloves, with lesions confined to the contact area. A Type IV reaction was suggested by the positive patch test to the rubber glove at D5.

We note that over 20% of patch-test reactions can be missed if a D7 reading is not performed (7). Also, Dickel et al. (8) reported that 15% of patch-test reactions could be negative on D3 but positive on D4–D8. Thus, it is advisable to read patch test reactions at least up to D5.

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