

Short Communication

Allergic contact dermatitis from the adhesive remover wipe of stoma bags

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Skin disorders at ostomy sites are common and include irritant contact dermatitis from the draining fluid and/or the ostomy devices, intertrigo, and bacterial and mycotic infection (1). Allergic contact dermatitis has also been described, from a karaya seal ring (2), stoma adhesive paste (3), and rubber (4). The allergens causing contact dermatitis from ostomy bags, have been defined as epoxy resin (5-7), diaminodiphenylmethane (8) and polyisobutylene (9).

Case Reports

Case no. 1

A 58-year-old psoriatic woman underwent low abdominal resection for carcinoma of the colon. A permanent colostomy was inserted. 2 weeks after she started wearing the 2-piece stoma bag (ConvaTec, ForConvaTec, Uxbridge, England), an erythematopapular eruption appeared around the stoma. Several days later, the skin in the peristomal area became eroded, and the erythema extended towards the upper abdomen. Bacteriological and mycological tests from the affected area were non-

contributory. Contact dermatitis from the stoma was suspected, and the patient was treated with topical corticosteroids; however, there was only mild improvement. A series of patch tests was performed (Table 1). A positive reaction (+) was observed to the adhesive remover wipe after 2 and 4 days, confirming the diagnosis of allergic contact dermatitis from the stoma bag adhesive remover wipe. Additional patch testing with the adhesive remover wipe ingredients was refused. The patient was advised to stop using the adhesive paste and the protective barrier, so as to avoid the need for the adhesive remover. Thereafter, the cutaneous lesions involuted completely. The patient continues to use the same colostomy bag, changing it more frequently.

Case no. 2

A 57-year-old woman started using a 2-piece urostomy device (ConvaTec, ForConvaTec, Uxbridge, England) after undergoing cystectomy for treatment of carcinoma of the bladder. 3 weeks later, acute dermatitis developed in the area around the urostomy (Fig. 1) and extended towards the chest. Patch test results are shown in Table

Table 1. Patch test results

	Patient no. 1		Patient no. 2	
	D2	D4	D2	D3
standard series	—	—	nickel sulfate 5% pet. +	
colostomy adhesive ring, as is	—	—	—	—
urostomy adhesive ring, as is	—	—	—	—
plastic bag, as is	—	—	—	—
adhesive paste, as is	—	—	—	—
protective barrier, as is	—	—	—	—
adhesive remover wipe (AllKare), as is	+	+	+	+
d-limonene 1% pet.	NT	NT	+	+
coconut diethanolamide 0.5% pet.	NT	NT	—	—



Fig. 1. Acute dermatitis in Case no. 2.

1. The allergic reaction to nickel sulfate had past relevance, but the allergic reaction to the adhesive remover had current relevance as the cause of the contact dermatitis. Soon after stopping the use of the adhesive remover wipe, the allergic contact dermatitis resolved completely.

Discussion

The constituents of the stoma bag adhesive remover wipe used by our patients (ConvaCare, ForConvaTec, Uxbridge, England) include: C₁₂ – C₁₅ benzoate alcohol, d-limonene, high-purity hydrocarbons, ethoxylated alkylaryl alcohol, coconut diethanolamide, 2,4-dichlorobenzyl alcohol, and butylated hydroxytoluene. We could not perform patch tests with each of the components of the remover solution because of the patients' refusal. Nevertheless, the positive reaction to d-limonene in the 2nd patient points to d-limonene as 1 of the causative allergens of the contact dermatitis from the adhesive remover. D-limonene, a by-product of citrus juice production, is gaining widespread use as a defatting and cleaning agent. When exposed to air, d-limonene is rapidly oxidized, releasing oxidation products that are highly allergenic. Recently, contact allergy to oxidized d-limonene has been described among dermatitis patients (10).

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