

Contact dermatitis due to patient identification wrist band

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An identification wrist band (ID-wrist band) is widely used to avoid the misidentification of patients. This is made from polyvinyl chloride (PVC) of low allergenicity (1). Since its introduction in May 1999 to our university hospital, over 30,000 patients have had one without any severe adverse effect, except for the present case.

Case Report

A 30-year-old woman was admitted to the psychiatric department with depression. She wore an ID-wrist band (420 Vinyl Band (White-11)®, Precision Dynamics Inc., California, USA) on her left forearm. One day after application of the band, an itchy eruption appeared. On examination, well-defined erythema with infiltration, 8 cm across, was seen on



Fig. 1. Bullous eruption on the left forearm.

the left forearm (Fig. 1). Several bullae, 5–10 mm in diameter, were also present. Removal of the ID-wrist band and treatment with topical and then oral corticosteroid led to resolution of the dermatitis, leaving slight hyperpigmentation, within 7 days. Histopathological findings, with

spongiosis and severe upper dermal oedema, were characteristic of allergic contact dermatitis.

A similar ID-wrist band gave a +++ patch test reaction at D2 and D3, according to international guidelines. In contrast, no reaction was observed among a healthy con-

Table 1. Cases reported since 1973 (Medline search September 2001)

Reference	Age	Patch test		History of CD from adhesive tape
		Band as is	Additives	
(1)	NA	(–)	ND	NA
(4)	11 months	(–)	ND	NA
	3 years	(–)	ND	NA
	2 years	(–)	ND	NA
	3 months	(–)	ND	NA
	1 year	(–)	ND	NA
	8 months	ND	ND	NA
	2 years	ND	ND	NA
(5)	64 years	(+)	di-isodecyl phthalate	NA
(3)	73 years	(+)	resorcinol monobenzoate, benzoyl peroxide	yes

Abbreviations: NA, not available; ND, not done; CD, contact dermatitis.

trol group ($n = 10$). We therefore diagnosed the case as contact dermatitis due to the ID-wrist band. Because the patient refused further patch testing, we could not identify the allergen.

Comment

The ID-wrist band responsible for the severe reaction was made from PVC, which itself has little antigenicity, though its additives may rarely sensitize (1). Vinyl chloride monomer (2) was excluded as a cause by the negative controls. We found 11 previous case reports of ID-wrist band dermatitis (Table 1), 3 of which were allergic contact dermatitis, but none were as severe as the present case.

A previous case reported (3) also

had a very short (24h) latency period (time between exposure and eruption). Interestingly, both that case and ours had past histories of contact dermatitis due to adhesive tape. Cross-reactivity between an ingredient of adhesive tape and the ID-wrist band allergen might therefore be occurring. Only the investigation of more such cases will clarify this.

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