

Short Communications

Allergic contact dermatitis due to *Hygrophila salicifolia*

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Key words: phytodermatitis; *Hygrophila salicifolia*; plants; allergic contact dermatitis; occupational; aquaria.
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Case Report

A 37-year-old man presented with patches of erythema and vesiculation on the forearms and dorsa of the hands. His job involved maintaining aquaria. The dermatitis appeared 2 days after working on an aquarium without gloves. He was tested with a standard series and was positive to Disperse Blue. We identified *Hygrophila salicifolia* in the aquarium, among other common plants. Subsequent patch testing with a plant series and patch and photopatch testing with intact *Hygrophila salicifolia* were all negative. Afterwards, patch testing with its crushed leaves and slices of stalks in acetone, as recommended by Fisher (1), revealed a ++ reaction at D 4. The same test was negative in 20 controls.

Discussion

Hygrophila salicifolia is a dicotyledonous plant of the family Acanthaceae. Its lanceolate leaves are 10–15 cm long and 2 cm wide, pale green when immersed in water, dark green when dry. The plant is found in Asia and South America and has come to Europe as an ornamental plant in aquaria. To our knowledge, contact sensitization to *Hygrophila salicifolia* has not been reported before.

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Contact hypersensitivity to monobenzyl ether of hydroquinone used to treat vitiligo

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Key words: allergic contact dermatitis; monobenzyl ether of hydroquinone; vitiligo; medicaments; lack of cross-sensitivity. © Munksgaard, 1998.

Monobenzyl ether of hydroquinone (MBEH) (1) has been shown to be effective in clearing residual pigmentation in vitiligo (2).

was noted at D2 and D4 in each of the 3 vehicles. There was no reaction to hydroquinone.

Case Report

A 47-year-old woman with a 16-year history of extensive vitiligo was given a depigmenting cream containing MBEH 20% to clear residual areas of normal pigmentation. Over the subsequent 6 weeks, she developed dermatitis at the sites of application. The patient undertook a ROAT with MBEH 5% cream at an unaffected site and this produced a similar dermatitis. She was patch tested to our standard series, hydroquinone 1% pet., and MBEH 1% in fatty acid propylene glycol (FAPG), pet. and Unguentum MerckTM. A ++ reaction to MBEH

Comment

Sensitization to MBEH has been said to occur in 5% of patients using Benoquin ointment (MBEH 20%) (3). We have found no reports of allergic contact dermatitis from MBEH demonstrated by patch testing in patients with vitiligo. Cross-sensitization between MBEH and hydroquinone has been described (4), but was not present in our patient. Mosher et al. (2) describe a retrospective study of 18 vitiligo patients using MBEH 20%, in which they found contact dermatitis in 1 patient, but there are no details of patch testing. MBEH commonly produces irritant reactions, and dermatitis has been de-

scribed in 13% of patients (5) using it as a depigmenting cream. Patch testing in our patient confirms that it is also a potential sensitizer when used to treat patients with vitiligo.

References

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Antimicrobials: preservatives, antiseptics and disinfectants

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Key words: antimicrobials; antiseptics; biocides; allergic contact dermatitis; disinfectants; preservatives. © Munksgaard, 1998.

Antimicrobials are widely used in topical medicaments, cosmetics and many household, industrial (biocides), and other products, such as paper, napkins, and shoes (1, 2).

Materials and Methods

Between January 1985 and December 1997, 8521 patients were investigated in our contact allergy clinic. Patch test allergens were supplied by Trolab (Hermal), Chemotechnique Diagnostics, or prepared in-house. The patch test materials were van der Bend[®] square test chambers on Mepore[®] acrylic tape, covered with Mefix[®]. Results were read 2, 3, or, usually, 4 days after application, in accordance with IDCRG guidelines.

Results

4567 patients (54%) had at least 1 positive reaction to the allergens tested. Tables 1, 2 give the antimicrobial allergens detected.

Discussion

The methyl(chloro)isothiazolinone mixture was the most common antimicrobial allergen. In a recent study (3), its frequency had almost halved in 1991–1996 relative to 1985–1990 (4), and reactions to formaldehyde and its releasers, such as quaternium-15, diazolidinyl urea, imidazolidinyl urea, DMDM hydantoin, and bromonitropropanediol had almost doubled. The newer preservative mixture containing methyldibromoglutaronitrile and phenoxyethanol (also called Euxyl[®] K400), which we have been routinely testing since April 1992, has now become increasingly important, the principal culprit being methyldibromoglutaronitrile (dibromodicyanobutane) (5). The spectrum of preservatives found to be allergens may differ from country to country (6, 7). Other

cosmetic preservatives identified were chloroacetamide, triclosan (mainly in deodorants), bradophen (in an “udder cream” used to treat hand dermatitis), captan (in hairdressing products), farnesol (in antiperspirants, cross-reacting with balsam of Peru), and bromonitrodioxane.

The parabens and thimerosal, most of the positive re-

Table 1. The most frequent antimicrobial allergens between 1985 and 1997 (%s are given for standard series substances) ($n=8521$)

Rank	Allergen	Number
1	methyl(chloro)isothiazolinone	143 (1.5%)*
2	thimerosal	136**
3	merbromine	94**
4	iodine	89
5	cetrimide	88
6	formaldehyde	80 (0.9%)
7	parabens	71 (0.8%)
8	chloramine	43
9	quaternium-15	32
10	nitrofurazone	29
11	quinoline mix	28 (0.3%)
12	benzyl alcohol	25***
	benzoic acid	25
	thiocyanomethylbenzothiazole	25
	chlorhexidine	25
13	glutaraldehyde	22
	methyldibromoglutaronitrile + phenoxyethanol	22
14	chloroacetamide	20
	diazolidinyl urea	20

* Methyl chloroisothiazolinone was not introduced into the standard series until March 1987.

** Thimerosal and merbromine are organic mercurials, so sensitivity to them is usually associated with reactions to other mercurials. In thimerosal, the thiosalicylic acid part may also be responsible for the reaction.

*** Benzyl alcohol is also a perfume component.