

Contact dermatitis and stomatitis due to amine fluoride

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Case Report

For prevention of dental caries, a 17-year-old boy had intermittently used a gel containing different fluoride compounds over a period of 2 years. In the last 2 months, 1 to 2 days after application, he had developed itchy perioral erythematous papules and plaques, with vesicles of the oral mucosa. The lesions healed within 1 to 2 weeks, followed by perioral scaling. Other dentifrices were tolerated well.

Patch tests were carried out with the European standard series, drug and ointment series and the 2 gels that the patient had used, diluted with 0.9% NaCl solution and tested at 1:1, 1:10, 1:100, 1:1000, and 1:10,000. At D1, D2, and D3, positive reactions (++) were observed to one of the gels at all dilutions. The ingredients of this gel, Elmex Gelee®, obtained from GABA International L.L.C., were then patch tested. Only component A, which was decoded as amine fluoride, showed a strongly positive reaction (++) at D1, (+++ at D2 and D3). For patch testing, we used the same concentration of amine fluoride as was present in the gel (3.724% aq.), which contains the 2 amine fluorides olaflur (N'-octadecyl-trimethylenediamine-N,N,N'-tris-(2-ethanol)-dihydrofluoride) and dectafur (9-octadecenylaminhydrofluoride).

Comment

The application of fluoride-containing toothpaste, gels, or drugs is commonly used to prevent caries. They contain several components with allergenic properties, such

as abrasive and cleansing agents, colophony, flavourings, binding agents, preservatives, thickeners and colourings (1-3). There is no previous report of contact allergy to amine fluoride. Fluoride can also cause non-eczematous skin reactions: urticaria, perioral dermatitis, acne-like eruptions, or ulcerous stomatitis (4-7).

In addition, concentrations of fluoride above 0.5% may give non-specific pustular patch test reactions (1). However, we diluted the gel far below this value. Furthermore, 5 healthy control subjects did not show any reaction to amine fluoride at this dilution.

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Allergic contact dermatitis from rosemary (*Rosmarinus officinalis* L.)

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Key words: allergic contact dermatitis; plants; rosemary; Labiatae; herbal remedies; *Rosmarinus officinalis* L.; lack of cross-sensitivity. © Munksgaard, 1997.

Rosemary (*Rosmarinus officinalis* L.) is a plant of the Labiatae family, to which thyme (*Thymus vulgaris*), origanum (*Origanum vulgare*) and mint (*Mentha piperita*) also belong.

Case Report

A 56-year-old man applied rosemary leaf plasters for a pain in his knee. After 3 days, he developed an acute itchy vesicular exudative dermatitis in the area of appli-

Table 1. Patch test results with Labiatae

	D2	D4
rosemary leaves (as is)	++	+++
thyme (as is)	—	—
origanum (as is)	—	—
mint (as is)	—	—

cation. Lesions improved in 10 days after withdrawal of the plasters. Patch tests to Labiatae were positive only to rosemary leaf (Table 1), which was negative in 10 controls.

Discussion

Rosemary is a plant commonly used as a spice, flavouring agent and naturally-occurring antioxidant (1). It has also been used for its medical properties. There have been reports of the inhibition of carcinogenesis by rosemary and its constituents (1, 2). Because of its anti-inflammatory properties, it has been used on local injuries.

Contact dermatitis due to plants applied topically for

medical purposes has often been described. Rodriguez et al. (3) reported contact dermatitis caused by burdock (*Arctium lappa*) applied in plasters for knee and ankle injuries (4). Del Pozo et al. (4) reported allergic contact dermatitis due to *Verbena officinalis* L. applied topically to the chest for bronchitis (4).

To our knowledge, this is the 1st documented report of a confirmed allergic contact dermatitis from rosemary leaves. We did not find cross-reactions with other members of the Labiatae.

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Maculopapular and urticarial eruption from cetirizine

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Key words: maculopapular eruption; drug reaction; cetirizine; antihistamines; ethylenediamine; positive patch test; medicaments; cross-sensitivity. © Munksgaard, 1997.

Recently, we reported an erythematous maculopapular eruption caused by cetirizine in an asthmatic patient, confirmed by positive oral challenge test. Skin tests (patch, prick and intradermal) were negative (1).

Case Report

A 70-year-old non-atopic woman was admitted because of a 1-week history of erythematous maculopapular eruption, predominantly follicular on the abdomen and urticarial on the thighs. She had been treated with lisinopril, betaistine and prazepam for hypertension, dizziness and anxiety since 1987 and with cetirizine (10 mg oral daily) for facial itching over the last 2 weeks. In the past, the patient had had an allergic contact dermatitis caused by an antifungal ointment. Histologic examination of a thigh lesion revealed slight spongiosis and a perivascular lymphohistiocytic infiltrate with some eosinophils. Direct immunofluorescence did not detect deposits of immunoglobulins and complement components. Haematological changes were not found; in particular, there

Table 1. Results of patch, prick and intradermal tests

Patch tests	D2	D3
GIRDCA standard series		
ethylenediamine dihydrochloride 1%	+++	++
neomycin sulphate 20%	++	+++
fragrance mix 8%	++	++
diethylenediamine (piperazine) 1% ^{a)}	++	++
cetirizine 1% ^{a)}	—	—
cetirizine 2.5% ^{a)}	++	++ ^{b)}
cetirizine 5% ^{a)}	+++	+++ ^{b)}
Prick tests ^{c)}	20 min	D1
cetirizine 1%	—	—
cetirizine 2.5%	—	—
cetirizine 5%	—	—
Intradermal tests ^{d)}		
cetirizine 1%	+++ ^{e)}	—
cetirizine 0.5%	++ ^{e)}	—
cetirizine 0.1%	++	—
cetirizine 0.05%	+	—

^{a)}pet. ^{b)}Persistent at D5. ^{c)}Hydroglyceric solution. ^{d)}Saline solution. ^{e)}Erythematous-oedematous reaction.

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