



Fig. 1. Erythematous scaly eruptions on the patient's eyelids.

on her eyelids (Fig. 1). She did not use eyelash curlers or any other cosmetics, but had applied an eyelid paste on her upper eyelids every morning for 2 years for cosmetic purposes. The dermatitis disappeared soon after discontinuing the eyelid paste application followed by treatment with topical corticosteroid.

Patch testing with an occlusion time of 2 days on her back gave positive reactions on days 3, 4, and 7 to the eyelid paste (as is) and its chief ingredient (50% v/v) natural rubber latex (NRL) (low ammonia, 10% pet.). No reactions were detected to parabens, fragrances or other ingredients, including rubber additives and pre-

servatives. Serum total IgE was 148 IU/ml. She had never worn rubber gloves. A prick test with NRL solution from rubber gloves (1) was negative as was also a RAST to NRL.

Comment

There are few reported cases of delayed-type hypersensitivity to NRL, in spite of the current frequency of immediate-type reactions (2–4). We propose 3 mechanisms that may have contributed to its induction in this case: (i) weak barrier function of eyelid skin, (ii) repeated and long-term application of NRL, and (iii) application of liquid NRL, which has shown an earlier, stronger reaction than dried rubber latex on patch testing (4).

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Drug eruption due to flavoxate hydrochloride

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An 83-year-old man presented with pruritic erythema all over the body, accompanied by fever and loss of appetite, which had started 1 month before. He had been taking Bladderon® (flavoxate hydrochloride; Nippon shin-yaku Co. Ltd., Kyoto) 200 mg t.d.s., tamsulosin hy-

drochloride 0.2 mg u.d.s., and allylestrenol 25 mg d.d.s. for prostatic hypertrophy for about 6 months. Histological findings of erythema on the right forearm demonstrated a dense perivascular infiltration of lymphocytes and a small amount of eosinophils.

We performed patch tests with 1, 5, and 10% pet. of flavoxate hydrochloride, tamsulosin hydrochloride, and allylestrenol. Only flavoxate hydrochloride showed a positive response at D3 to 10% pet. Patch tests with 1, 5, 10% pet. of flavoxate hydrochloride in 4 normal subjects showed no erythema or papular response at D2 and D3. Oral challenge test with flavoxate hydrochloride 600 mg produced pruritic erythema all over the body, with fever. LST (lymphocyte stimulation test) with flavoxate hydrochloride was negative.

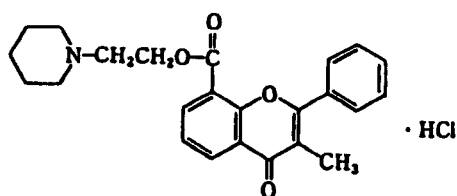


Fig. 1. Chemical structure of flavoxate hydrochloride.

Discussion

Flavoxate hydrochloride, a flavoxate derivative, is used for the treatment of urinary frequency and urinary retention due to neurogenic bladder, chronic prostatitis and chronic cystitis in Japan, UK, USA and Italy. Flavoxate hydrochloride causes certain other adverse effects, e.g., gastrointestinal symptoms and sleepiness (Nippon shin-yaku, personal communication), but no case of drug eruption due to flavoxate hydrochloride has been reported in the English literature.

Flavoxate suppresses the overactive bladder by its relaxant activity on the detrusor muscle, and its central suppressive effect on the micturition reflex (1). No case of drug eruption due to the similar well-known drugs,

oxybutynin hydrochloride and propiverine hydrochloride, has been reported. The structural formula of flavoxate hydrochloride is shown in Fig. 1. As this drug is commonly used for urinary frequency and urinary retention in elderly people, attention should be paid to the erythematous type of drug eruption well-seen in our case.

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Contact dermatitis from pheniramine maleate in eyedrops

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Key words: antihistamines; allergic contact dermatitis; pheniramine maleate; eyedrops; cross-reactivity; medicaments; ophthalmics. © Munksgaard, 1999.

Case Report

A 30-year-old woman, with a history of allergic oculorhinitis from Gramineae pollen, presented with bilateral conjunctivitis and eyelid dermatitis for the past 4 months.

She was patch tested with the GIRDCA standard series and the ophthalmic preparations that she was using, showing positive reactions to nickel sulfate 5% pet., para-phenylenediamine 1% pet. and Tetramil® (as is), an eyedrop containing tetrazoline chloride (sympathomimetic) and pheniramine maleate (H1-receptor antagonist). Further patch testing with the individual constituents of Tetramil® revealed a positive reaction to pheniramine maleate (D2 +/D3 ++) (Table 1), and the patient completely recovered after abandoning the eyedrops.

1 month later, we recalled the patient to test other alkylamine derivatives, including dexchlorpheniramine maleate, chlorpheniramine maleate and dimethindene maleate, together with promethazine hydrochloride and

diphenhydramine hydrochloride, a phenothiazine and an ethanolamine antihistamine, respectively. Positive reactions were found with dexchlorpheniramine, chlorpheniramine and diphenhydramine (Table 1). A careful history revealed that in the past, the patient had occasionally used a cream containing chlorpheniramine maleate without problems.

Comment

Allergic contact dermatitis due to antihistamines of the alkylamine group, such as pheniramine maleate, is described mostly in Italy (1), where they are used in various preparations (Polaramin® cream, Trimeton®, Fenistil® gel, Tetramil®, Visuglican®) (2–4). Tetramil® eyedrops, like other antihistamine eyedrops, may be sold in Italy without a prescription.

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Table 1. Patch test results with antihistamines

Allergen	D2	D3
pheniramine maleate 1% aq.	+	++
dexchlorpheniramine maleate 1% aq.	+	++
chlorpheniramine maleate 1% aq.	+	++
dimethindene maleate 0.1% pet.	–	–
promethazine hydrochloride 0.1% pet.	–	–
diphenhydramine hydrochloride 2% pet.	+	++