

Allergic contact dermatitis from dibucaine in Proctosedyl[®] ointment without cross-sensitivity

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Key words: dibucaine; antihemorrhoidal; anesthetics; no cross-sensitivity; medicaments. © Munksgaard, 1998.

A 36-year-old woman complained of a pruritic, well-demarcated, erythematous patch around her anus. She had intermittently applied an antihemorrhoidal ointment (Proctosedyl[®]) to ameliorate her symptoms for 4 months. Her symptoms relented for the time being, but relapsed 3 months after application in January 1997. She was worried about vaginitis and had inserted clotrimazole and povidone vaginal suppositories herself. Her symptoms were getting worse and the above lesions developed in less than 1 month.

Patch tests were performed with Proctosedyl[®] ointment as is, clotrimazole suppository as is, povidone suppository as is, and povidone solution (1% aq.). Proctosedyl[®] ointment showed a strong positive reaction (hydrocortisone, dibucaine hydrochloride, neomycin sulfate and esculoside). Patch tests with its ingredients showed a strong positive reaction to dibucaine hydrochloride.

Cross-reactivity was checked for her future anesthesia, using several topical and systemic anesthetics, such as lidocaine, a mixture of lidocaine and prilocaine (EMLA[®]), bupivacaine, tetracaine, proparacaine and propopof. The results were all negative.

Discussion

Dibucaine is an amide type of anesthetic, and allergic contact dermatitis from dibucaine is not rare in the UK (1) or Japan (2). Allergic contact dermatitis from amide anesthetics, such as lidocaine and dibucaine (cinchocaine), has commonly been associated with antihemorrhoidal preparations including Proctosedyl[®] ointment (3). Cross-reactivity among the ester group of anesthetics is well-known. Although cases showing simultaneous sensitivity among the amide group of anesthetics have been reported, they do not always occur, as in the present case (1, 3).

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Contact dermatitis from barley

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Key words: allergic contact dermatitis; barley; malt; occupational; maltworker; respiratory effect. © Munksgaard, 1998.

Partial germination of barley by artificial means produces malt, rich in dextrin, maltose and amylase. Malt is used in brewing beer, as well as in the manufacture of malted milk and similar food products.

Case Report

A 54-year-old maltworker, who had worked as a silo operator for 3 years, developed eczema on the fingers of both hands. His job was to clean out the silos and to fill

sacks with the residues of barley and malt. When he cleaned the barley silos, his eczema worsened and spread to the trunk and limbs. He also had some dyspnoea. For this reason, he stopped cleaning out the silos but continued to fill sacks with residues of barley and malt. The eczema improved during holidays. There was no personal or family history of atopy. He could drink beer without problems.

Patch tests were carried out to the Portuguese standard series, fragrances, a food series, and residues of barley and malt, with the following positive results:

		D2	D4
ammoniated mercury	1% pet.	++	++
thimerosal	0.1% pet.	+	++
barley residues	as is	++	++
barley residues	10% pet.	++	++
malt radicle	as is	++	++
malt radicle	10% pet.	++	++
malt residues	as is	++	++
malt residues	10% pet.	++	++

10 control subjects tested with the barley and malt residues were negative. Biopsy of a positive patch test to residues of barley at D4 showed spongiosis, and perivascular lymphocytes with eosinophils in the dermis. A prick test to barley was negative. Serum IgE was 97.9 IU/ml.

Discussion

Immediate-type allergy has been reported after drinking beer, and protein components of barley malt seem to be responsible (1–3). Gutgesell & Fuchs (4) reported an occupational contact urticaria from beer in a waitress. Our patient had no problems with drinking beer, but

developed an eczema on his fingers when he handled barley malt residues. Cronin (5) reported a farm labourer with contact dermatitis from barley dust. To our knowledge, there are no other cases reported.

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Novel causes of contact dermatitis from offshore oil-based drilling muds

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Skin reactions are common among offshore drilling workers who suffer frequent skin contamination with oil-based 'mud' (1). The original oil-based muds used diesel oil as their base. Calcium salts in the drilling mud were associated with calcinosis cutis (2). An unusual reaction to drilling mud is the production of umbilicated papules, resembling infected chemical burns, occurring soon after caustic chemicals penetrated abraded skin, and histologically showing an acquired perforating disorder (3). In the mid 1980s, diesel was replaced by oils that were less irritating to the skin, which relied heavily on fatty acid amines homologous to ethylenediamine, diethylenetriamine (DETA) and triethylenetetramine (TETA), allergic contact dermatitis from which has been reported in several offshore oil workers (4).

Case Reports

Case no. 1

A deep-sea diver, aged 33 years, presented with acute blistering dermatitis of the dorsum of the feet, ankles, wrists, neck and genitalia. He had worked 4, 12-h shifts

over the last 4 days, during which his skin had been saturated with old drilling mud on the sea bed. He had previously worked for several years under the same conditions without any skin problem. Months later, he experienced a similar reaction. He had modified his diving gear to provide complete protection of the feet and legs, but contamination with mud had still occurred around his wrists and neck. Since then, he had not been allowed to dive. Patch testing with the European standard series, facial and plastic and glue series was positive to colophony and abitol, benzoyl peroxide, p-tert-butylphenol-formaldehyde resin, balsam of Peru and fragrance mix, but negative to ethylenediamine, diethylenetriamine and triethylenetetramine.

A sample of the mud obtained from the sea bed was analysed by Fourier transform infra-red spectroscopy (FTIR) and scanning electron microscopy/energy dispersive X-ray microanalysis (SEM/EDXA), and was found to contain aluminium, silicon from the silicates, sulfur, potassium, calcium, barium and iron. The volatile phase contained hydrocarbon very close to white spirit or low boiling point petroleum ether, while the mineral oil extracted was paraffinic or naphthenic. Further patch test-