

genic latex proteins in their products. In the glove purchase process, this information has been given to the locally responsible employees in our region.

KARIN WRANGSJÖ, MD, PhD
Department of Occupational
Dermatology
Karolinska Hospital
Sweden

MARIA LUNDBERG, BSc
MIAB
Box 97
Knivsta
Sweden

Accepted for publication 27 December 1995

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Improper treatment of anaphylaxis

I WAS DISTURBED and dismayed to read in two separate case reports in your issue of June 1995 (vol. 50, no. 6) that in two of the three patients, the treatment of the anaphylactic episodes did not include the most fundamental of all, i.e., epinephrine.

In the first case report, that by Novembre et al. entitled "Skin-prick-test-induced anaphylaxis", the patient, upon developing anaphylaxis, was treated by administration of intravenous corticosteroids and oral antihistamines. Both have an onset of action taking hours. The fact that the symptoms disappeared in a few minutes was more a matter of luck than management.

Fortunately, in the second case, the patient was indeed treated with subcutaneous epinephrine.

Then, in a different case report by Dechamp et al. entitled "First report of anaphylactic reaction after fig (*Ficus carica*) ingestion", it was noted that a 77-year-old woman developed itching, urticaria, angioedema, asthma, and gastrointestinal complaints. Yet, at the hospital emergency ward where she was sent, the patient was given only a 4-mg injection of betamethasone. Fortunately, she recovered despite the treatment, which could not have been effective.

Anaphylaxis may be life-threatening. A major cause of death is shock and/or airway obstruction.

Blood pressure support and relief of airway obstruction by subcutaneous epinephrine, intravenous normal saline to maintain intravascular volume, and supplemental oxygen would be the first line of treatment. H₁-

blocking antihistamines are perhaps second line and corticosteroids probably third line in this situation.

If the authors in the second report chose not to use epinephrine because of the older age of the patient or were concerned by the presence of chest pain, it behooves them to explain that this was the reason for withholding epinephrine rather than ignoring its use altogether.

Perhaps the Journal should have reconsidered publishing these papers submitted without proper emphasis on the appropriate pharmacotherapy for this dangerous condition.

ALLAN KNIGHT
Head
Division of Clinical Immunology
Sunnybrook Hospital
2075 Bayview Avenue
Room HG-40
North York
Ontario
Canada M4N 3M5
Tel. (416) 480-4720
Fax. (416) 480-4802

Accepted for publication 20 December 1995

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Allergic contact dermatitis to chloramphenicol

CONTACT with topical medicaments applied to the skin or mucosa can give rise to various clinical manifestations of immunologic and non-immunologic origin. The list of topical drugs most likely to elicit contact dermatitis changes over the years. Apart from neomycin, the incidence of sensitization, caused by topical use, to other antibiotics has diminished. That incidence depends mainly on the intrinsic sensitizing power of the medicament and secondarily on its frequency of use in clinical

practice (1). Nevertheless, a very important factor which clearly favors the onset of contact allergy from topical medicaments is the existence of alterations in the barrier layer of the epidermis. In the same way, the use of other ingredients incorporated in vehicles to increase the therapeutic action of the drug can also induce alterations in the epidermal barrier, increasing the possibility of allergic reactions (2).

Allergic contact dermatitis caused by chloramphenicol is rare because it is not widely used topically in man for otorhinolaryngologic, gynecologic, ophthalmologic, and dermatologic treatment.

■ A 30-year-old male farmer with a clinical history of rhinitis and conjunctivitis was referred to our department in order to study the possibility of drug allergy.

Approximately 10 years before coming to us, he had once had treatment with eye-drops containing chloramphenicol for conjunctivitis.

Although this is uncommon, topical antibiotics can cause severe allergy.

Twenty-four hours after taking the eye-drops, he developed severe erythema and edema involving the eyelids of both eyes and the upper half of his face, leading to

worse itching and conjunctival hyperemia. He stopped using the eye-drops and thereafter symptoms wore off progressively without any other treatment.

Subsequently, he twice had accidental contact with medicaments containing chloramphenicol for use in animals. The first time, he handled a disinfectant solution for veterinary use with unprotected hands; 24 h later, the contact area of his hands was swollen, itchy, and erythematous. The second time, he spilled on his shoes an ampoule with other medicaments; approximately 48 h later, he developed edema, itching, and erythema involving the contact area in his feet. Our patient did not know the brand names of any of the medicaments involved; he remembered only that chloramphenicol was one of the compounds in all three cases. As far as the patient knew, he had never before had treatment with chloramphenicol.

When tested, our patient had neither symptoms of rhinoconjunctivitis nor lesions of dermatitis. First, the standard series was used in patch tests (True Test®, Pharmacia AS, Hillerød, Denmark). Afterward, he was patch-tested with chloramphenicol 1% in white petrolatum (pet), and pure white

with Al-Test® on the patient's back for 48 h, and all of them were read according to the ICDRG (International Contact Dermatitis Research Group) recommendations. Open patch tests with the same compounds were also carried out on the patient's forearm, in order to exclude an immediate reaction.

Open patch tests were negative after 30 min for both chloramphenicol 1% in white pet and pure white pet. Patch tests with the standard series were negative at 48 and 96 h. Patch tests with chloramphenicol 1% elicited a positive reaction at 48 and 96 h. Lesions of dermatitis in areas where the patient had previously had dermatitis did not appear after the test.

■ Contact dermatitis to chloramphenicol is rare, but does occur occasionally (2-9). Although it is not widely used topically, it may produce allergic reactions, particularly when applied to stasis ulcers and chronic eczema (1, 4, 10). Nevertheless, most cases have been elicited by eye-drops, but the frequency of the disorder seems to be low (3, 7, 11). Diagnosis of contact sensitization to chloramphenicol can be made by patch testing at different concentrations and in several vehicles (2, 8, 9). Urrutia et al. (6) suggest that, besides patch tests in appropriate concentration and vehicle, intradermal skin tests may be used to confirm the diagnosis. Nevertheless, patch tests should be retained as the main tool in the diagnosis of contact dermatitis.

In our patient, the drug was also administered by eye-drops for medical treatment; therefore, his disorder can be considered, in the first episode, as an iatrogenic case of contact dermatitis. Since most cases of contact sensitization to chloramphenicol are elicited by application on mucous membranes (3, 5-7, 11) or skin ulcers (2, 4, 10), another remarkable point in this case is the appearance of contact dermatitis by application on intact skin. This feature and the low concentration used for patch testing (1% pet) suggest strong sensitization in this case.

Our patient did not know whether he had been treated previously with any other drug containing chloramphenicol. Nevertheless, because of his job, he could have had contact with veterinary drugs containing chloramphenicol, and perhaps this could have been the means of sensitization. This is a remarkable feature because we have not found references that discuss the question of whether contact dermatitis to chloramphenicol may be caused by occupational exposure. From this point of view, our case would be a particular case of occupational elicitation, through handling veterinary products, of contact dermatitis from chloramphenicol in a farmer.

J. C. MOYANO, M. ALVAREZ, J. L. FONSECA, J. BELLIDO
FRANCISCO JAVIER MUÑOZ BELLIDO
Plaza de la Reina
No. 1-3, 4^aB
37001 Salamanca
Spain

Accepted for publication 24 November 1995

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Occupational hypersensitivity to sesame seeds

A PART from flour allergens as inducers of baker's asthma (1), other antigens have been reported to be sensitizers in the baking industry. To our knowledge, only one case of occupational sensitization to sesame has been reported (2), although anaphylactic reactions after ingestion have been described (3). We report a second case of occupational asthma induced by sesame.

The patient was a nonatopic, nonsmoking baker. For 5 years, he had had ocular itching, rhinitis, and dyspnea while working. He was previously diagnosed as allergic to wheat flour. Being out of work at the

time of the study, he was symptomless and used no medication, and the spirometric values were normal.

The crushed sesame seeds were extracted (20% w/v) for 8 h while shaking, centrifuged for 15 min at 4000 g, sterilized by filtration, and tested in 10 atopics as a control. Histamine release was carried out by a fluorometric method. Eight 10-fold dilutions of the allergen were tested.

SDS-PAGE of sesame extract prepared under different conditions was performed in 16% acrylamide minigels. Specific IgE detection by immunoblotting was performed by a diffusion method (4).

Skin prick tests to pollens, danders, mites, and α -amylase were negative, but wheat flour induced a 6×4 mm and rye a 9×5 mm wheal. Sesame induced a 20×16 mm wheal with numerous pseudopods. Histamine release was positive to sesame (higher than 40%) up to the last dilution tested. Neither positive skin tests nor histamine release was obtained in controls.

SDS-PAGE of the sesame extract revealed the presence of a principal component of 14 kDa, composed of two chains, as shown by 2-mercaptoethanol (2-ME) treatment (Fig. 1). Immunoblotting detected that this protein was the main IgE-binding component. Reduction with 2-ME showed that most of the specific IgE was directed to the unreduced molecule, only weak recognition of the heavy chain of the protein remaining (data not shown).

The patient experienced a 32% fall in PEF values 4 days after starting work after a prolonged absence, and he again needed salbutamol. He noticed that the symptoms were not induced by flour, but appeared while he was working in the place where

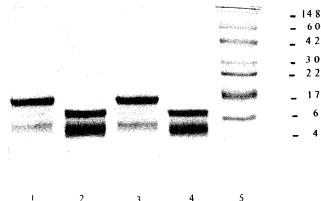


FIGURE 1 SDS-PAGE of 20% extract of sesame seeds. Lanes 1 and 3: sample buffer without reducing agent; lanes 2 and 4: sample buffer with 2-mercaptoethanol; lanes 1 and 2: samples boiled in buffer for 5 min; lanes 3 and 4: sample at room temperature; lane 5: standards.

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