

viously been reported as a cause of dental plate hypersensitivity. Patient no. 7 showed a positive reaction to palladium which is found in dental amalgam. No decision has yet been made to replace his dental fillings.

Burning mouth syndrome, orofacial granulomatosis and lichen planus have all been shown in some studies to be associated with delayed hypersensitivity (1, 3), while we found none in these latter 2 categories. Palladium in dental amalgam has been shown to be relevant in 2 other intra-oral studies (4, 5). Our study also shows the importance of flavourings when assessing oral problems, which agrees with previous studies (1–6). It also highlights the potential of patch testing with the patient's own toothpaste 50% pet. Regarding the 8 patients who were negative, our patch test series may lack some allergens of clinical importance. None of these patients were atopic. Other causes that might give rise to oral symptoms would be irritant or urticarial reactions to foods, food additives and flavourings.

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Allergic contact dermatitis from common ivy confirmed with stored allergens

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Several members of the Araliaceae family have been reported as causing allergic contact dermatitis and skin irritation (1–4). Common ivy, *Hedera helix* L. subsp. *helix*, and *Hedera helix* L. subsp. *canariensis* both contain falcarinol and didehydrofalcarinol, polyacetylenic compounds, heptadeca-1,9-diene-4,6-diyne-3-ol and heptadeca-1,9,11,16-tetraene-4,6-diyne-3-ol (4), respectively, which are powerful irritants and moderate sensitizers (5).

Case Report

A 60-year-old man with no previous history of contact or atopic dermatitis, who cared for his garden regularly, had had several outbreaks of itchy erythematous, oedematous lesions on the hands, forearms, neck and face in the last year. Though with no seasonal pattern, these lesions always appeared at the weekend, 8–12 h after pruning common ivy climbing over the walls of his house, and healed in 5–7 days.

The GEIDC standard series was patch tested, and a pesticides series (Marti Tor), plants series (Chemotechnique) and 1% extract of *Hedera helix* (with water: alcohol, 85:15) were applied in with Al-test[®] on Surgival[®]. All allergens tested were negative at D2 and D4. An

open patch test with fresh leaf and stem of *Hedera helix* elicited a ++ reaction at D2 and D4. In 10 controls, an open patch test with fresh leaf and stem of *Hedera helix* was negative. We tested the allergens of *Hedera helix*, supplied by BMH, and the patient showed ++ reactions to falcarinol 0.03% pet. and didehydrofalcarinol 0.3% pet. at D2 and D4.

Discussion

It is difficult to be sure which of the reported cases of ivy dermatitis have been truly allergic (4). However, since isolation of the allergens falcarinol and didehydrofalcarinol in 1987, the diagnosis of allergic contact dermatitis from common ivy has become more reliable (4, 7, 8). Falcarinol may be present in anticellulitic creams and gels, and other products such as shampoos, though only in eliciting concentrations. Therefore, pruning remains the most often reported cause of contact dermatitis (4, 6).

Falcarinol is chemically very reactive. It functions as an alkylating agent and can react easily with amino or other protein groups and thereby facilitate covalent binding to the surface markers of immunocompetent cells (4). Although falcarinol and didehydrofalcarinol had been stored at –26°C for more than 10 years in the

laboratory of BMH, they were still active, demonstrating excellent stability.

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Occupational allergic contact dermatitis from ceftiofur without cross-sensitivity

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Key words: ceftiofur; cephalosporins; lack of cross-reaction; occupational; allergic contact dermatitis; antibiotics; chicken vaccinator. © Munksgaard, 1998.

Case Report

A 39-year-old man, without previous atopy or skin diseases, presented with a 2-month history of severe hand eczema, associated with eyelid dermatitis. He worked as a chicken vaccinator and had handled the cephalosporin ceftiofur sodium (Excenel®, Pharmacia & Upjohn), a vaccine containing live herpes virus (Poultvac Marek®, Fort Dodge) and a diluent (pectone, sucrose, potassium phosphate and red phenol) for 1 year. He did not usually wear gloves and had tolerated systemic administration of betalactams such as amoxycillin and cefuroxime.

Patch tests with the European standard series, ceftiofur sodium (1% aq.) and diluent (as is) gave a +++ reaction at D2 and D4 only to ceftiofur sodium. Patch tests in 10 controls were negative. He was then patch tested with 1st generation (cefazolin, cefamandole), 2nd generation (cefuroxime, cefonicid, cefoxitin) and 3rd generation (cefotaxime, ceftazidime, ceftriaxone) cephalosporins, amoxycillin and ampicillin, all of them (5% aq.) being negative. Finally, prick and intradermal tests with betalactams (PPL, MDM, penicillin G, ampicillin, amoxycillin, cefamandole and ceftiofur) showed neither immediate nor delayed reactions.

Discussion

Ceftiofur sodium is a broad spectrum, 3rd generation cephalosporin, used exclusively in animals, mainly for treatment of respiratory infections in pigs and cows, as well as other infectious diseases in these animals. It is also used to prevent colibacillosis in chicks.

Our patient had an occupational allergic contact dermatitis from ceftiofur, with no cross-sensitivity to other betalactams. 3rd generation cephalosporins have 2 common chemical groups, a 7-amino-cephalosporinic acid and an aminothiazolyl-methoxil-iminic group. Ceftiofur sodium has an exclusive radical, the furanlycarbonylthio-methyl group (1), not present in other cephalosporins. The lack of cross-reaction to other 3rd generation cephalosporins suggests that this group might be responsible for sensitization.

We have found only 1 previous report of contact allergy to ceftiofur (2) in which cross-sensitivity among cephalosporins was not observed. Several cases of contact dermatitis from 3rd generation cephalosporins have been reported (3–5) with positive patch tests to more than 1 of this family of antibiotics.

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