

Discussion

Since its introduction in 1990 (8), the SL mix has been incorporated into our standard series. However, its ability to detect all Compositae allergy has been questioned (9–11). By adding the Compositae mix (9, 11), we are diagnosing allergic contact dermatitis in food handlers that would otherwise be missed. With the exception of case nos. 5 and 6, none of these patients were gardeners and their sole exposure to Compositae was occupational, the 1 factor common to all 6 being the handling of lettuce. In 4 of the 6 cases, dermatitis resolved with allergen avoidance. This group of patients is much younger than the typical Compositae-allergic patient, who is over 60 years and a gardener. In addition, all cases presented with hand dermatitis rather than an airborne distribution (12). Compositae dermatitis in food handlers may be commoner than recognized and the Compositae mix may detect previously unsuspected allergies.

References

1. Arlette J, Mitchell J C. Compositae dermatitis. *Contact Dermatitis* 1981; 7: 129–136.
2. Helander I. Contact dermatitis to lettuce. *Contact Dermatitis* 1984; 11: 249.
3. Oliwiecki S, Beck M H, Hausen B M. Compositae dermatitis aggravated by eating lettuce. *Contact Dermatitis* 1991; 24: 318–319.
4. Hausen B M, Andersen K E, Helander I, Gensch K H. Lettuce allergy: sensitizing potency of allergens. *Contact Dermatitis* 1986; 15: 246–249.
5. Friis B, Hjorth N, Vail J T Jr, Mitchell J C. Occupational contact dermatitis from *Cichorium* (chicory, endive) and *Lactuca* (lettuce). *Contact Dermatitis* 1975; 1: 311–313.
6. Krook G. Occupational dermatitis from *Lactuca sativa* (lettuce) and *Cichorium* (endive). *Contact Dermatitis* 1977; 3: 27–36.
7. Mitchell D, Beck M H, Hausen B M. Contact sensitivity to lettuce in a chef. *Contact Dermatitis* 1989; 20: 398–399.
8. Ducombs G, Benezra C, Talaga P et al. Patch testing with the "sesquiterpene lactone mix": a marker for contact allergy to Compositae and other sesquiterpene-lactone containing plants. *Contact Dermatitis* 1990; 22: 249–252.
9. Paulsen E, Andersen K E, Hausen B M. Compositae dermatitis in a Danish dermatology department in one year (I). Results of routine patch testing with the sesquiterpene lactone mix supplemented with aimed patch testing with extracts and sesquiterpene lactones of Compositae plants. *Contact Dermatitis* 1993; 29: 6–10.
10. Green C, Ferguson J. Sesquiterpene lactone mix is not an adequate screen for Compositae allergy. *Contact Dermatitis* 1994; 31: 151–153.
11. Hausen B M. A 6-year experience with Compositae mix. *American Journal of Contact Dermatitis* 1996; 7: 94–99.
12. English J, Norris P, White I, Cronin E. Variability in the clinical patterns of Compositae dermatitis. *Br J Dermatol* 1989; 121 (suppl 34): 27.

Photopatch test reaction to amitriptyline

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Photosensitivity is a known cause of acquired hyperpigmentation. Cutaneous side-effects of tricyclic antidepressants are rare and photosensitivity is an even more uncommon reaction (1). Protriptyline and imipramine are the tricyclics which have been implicated as photosensitizers (1).

Case Report

A 45-year-old woman, on alprazolam 0.5 mg and amitriptyline hydrochloride 25 mg oral daily for the past year, presented with a 1-month history of diffuse hyperpigmentation over exposed areas of the back and left side of the abdomen (areas not covered by the sari). Furrows and skin folds were spared. She did not recall any erythema, scaling or burning sensation. Blood and urine examinations were within normal limits.

Photopatch testing was performed, patch test materials being prepared by extracting the active ingredient (a.i.) from the commercially available preparation. The a.i. was separated from the excipients by first dissolving the tablets in suitable solvents. It was then filtered using 41 Whatman filter paper, dried at 40°C, and finely powdered with a mortar and pestle. 1%, 2%, 5% and 10% amitriptyline hydrochloride and 1% and 2% alprazolam were made up in an aqueous cream base. The allergen-charged Van der Bend chambers were applied in duplicate on either side of the back. Patch test readings at D2 were negative on both sides. The left side was then exposed to 15 J/cm² UVA. 1 day after irradiation, readings on both sides were negative, but after 2 days, amitriptyline 10% and 5% showed a positive reaction on the UVA-exposed site only, suggesting photosensitivity to the drug. Amitriptyline was stopped and the patient was recommended topical sunscreens. Patch testing in 8 and

photopatch testing in 7 controls with 5% and 10% amitriptyline was negative.

Comment

Phototoxic reactions may be difficult to distinguish from photoallergic reactions, though the former tend to be more obvious after 1 day (2). In this patient, the unirradiated side remained negative while the irradiated side showed a positive reaction 2 days post irradiation, thus suggesting photoallergy to amitriptyline. Photosensitivity to alprazolam is very rare, with only 1 case having

been reported (3), and is unlikely here as the photopatch test was negative.

References

1. Reynolds J E F, Prafft K. *Martindale The Extraparmacopoeia*, 31st edition. London: Royal Pharmaceutical Society, 1996: 302.
2. Champion R H, Burton J L, Ebling F J G, Rook, Wilkin-son, Ebling: *Textbook of dermatology*, 5th edition. Oxford: Blackwell Scientific Publications, 1992: 709.
3. Kanwar A J, Gupta R, DasMehta S, Kaur S. Photosensitivity due to alprazolam. *Dermatologica* 1990; 181: 75.

Local reactions after subcutaneous injections of β -interferon

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Case Report

A 36-year old woman was treated with subcutaneous (s.c.) injections of β -interferon (Betaferon®) for multiple sclerosis. By the 14th of 22 injections, she noticed a transient erythema (appearing after 3–5 days), and after 5 non-consecutive injections (4 in the arm, 1 in the abdomen), she showed infiltrated, red, vesicular, itchy lesions at all 5 injection sites, which healed in 3–4 weeks. She never experienced these reactions when the injections were made in the thighs.

She was patch tested with the European standard series (fragrance mix +, Amerchol L-101 +, wool wax alcohols ?+), Betaferon® (–), isopropanol-impregnated tissue, used before and after injection (–), and isopropanol (–). An intradermal (i.d.) test with Betaferon® was negative after 20 min, but positive after 2 days.

Discussion

The most common adverse reaction to s.c. injections of β -interferon (β -IF) is local erythema and infiltration (1) at the injection site (65%) (2). Local necrosis has also been reported (2, 3). Similar reactions with α -interferon are well-known. Although, clinically, an allergic reaction is suspected, no specific allergic reaction Types I or IV has yet been found. The immediate i.d. reactions are reproducible in healthy control subjects (4), though they are negative after injection of less than 200,000 IU/ml β -IF, so this is the recommended test concentration for predicting an IgE-mediated hypersensitivity (4). The re-

actions do not occur after each injection and can disappear after a few months (3). They are currently thought to be local non-specific inflammatory responses (3, 4) to β -IF, and to be influenced by the depth of the injection, which is why the injection site is important in eliciting the symptoms. In general, symptoms often occur after injections in the arms or thighs, and less frequently after those in the buttocks or abdomen, although our patient never had reactions after injections in the thigh. After the patient learned to inject herself properly, the symptoms faded away.

Schering (the supplier of Betaferon®) now provides a long injection needle, recommends not refrigerating the solvent, and advises the application of ice cubes after injection to minimize the local reaction.

References

1. Korczyn A D, Nisipeanu P. Safety profile of copolymer 1: analysis of cumulative experience in the United States and Israel. *J Neurol* 1996; 243 (4 suppl 1): 23–26.
2. Weinberg J M, Wolfe J T, Sood S, Saruk M, Rook A H, Spiers E M. Cutaneous necrosis associated with recombinant interferon injection. Report of 3 cases with interferon β -1b and review of the literature. *Acta Dermato-venereologica* 1997; 77: 146–148.
3. Giordano-Labadie S, Bazex J. Reactions locales aux points d'injection d'interferon β -1b. *La Lettre du GERDA* 1997; 14: 8–9.
3. Muranaka M, Suzuki S. Studies on safety problem by skin tests using human β -interferon preparation. *J Interferon Res* 1984; 4: 115–122.