

Short Communications

Clothing dye dermatitis masquerading as (coexisting) mimosa allergy

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Mimosa is a beautiful exotic tree commonly grown locally in yards and gardens. In the 1944 horror film, *The Uninvited*, the odor of mimosa betrayed the presence of the ghost. Mimosa is native to tropical and subtropical Asia, but it has been cultivated in other parts of the world for more than 100 years. In the US, it has escaped from cultivation and grows from Washington DC to Florida and west to Texas or even California.

Albizia julibrissin, or mimosa, is a member of the pea family, the *Fabaceae* or *Leguminosae*. This family is divided into 3 subfamilies: the *Mimosoideae* (mimosa and mesquite); the *Caesalpinioideae* (including redbud and honeylocust); and the *Papilionioideae* (including black locust and yellow-wood) (1).

Case Report

A 51-year-old retailer presented in 1998 with a bilateral annular eczema around the axillae. About 5 years before his initial visit, he had pruned a branch of a mimosa tree that grew in his back yard. The following day, he broke out under his right arm where he had held the limb in carrying it away. He assumed that it had induced the present eruption, as he continued to be plagued with recurrent periaxillary eczema that soon became bilateral. Treatment with mometasone cream improved the symptoms, but when this was discontinued, he again developed bright red raised plaques of eczema on the arm and chest around the axillae. The vaults of the axillae were spared.

Patch testing showed doubtful reactions to 3 textile resins, but ++ reactions to Disperse Blue 106 and 124. Patch tests to the flower, leaf and stem of his mimosa

tree were ++, + and ?+, respectively. Avoidance of colored clothing and topical mometasone promptly cleared the eruption.

Comment

According to Mitchell (2), Greenberg & Lester (3) stated that oil of mimosa could cause contact dermatitis. Mitchell & Rook (2) listed the plant from which oil of mimosa is obtained as *Acacia dealbata*, a profusely blooming native of Tasmania, which is the species most frequently sold by florists as mimosa. However, this species prefers zone 8b, a climate warmer than ours (7a). The local species sold as mimosa in most of the US is *Albizia julibrissin*. Reactions to mimosa are apparently rare. The plant is common in Arkansas, but we have never seen or heard of anyone allergic to this plant before.

The patient's present eruption was apparently caused by sensitivity to the dyes Disperse Blue 106 and 124, which are very closely related structurally (4). Tests to other PPD-related allergens were negative.

References

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2. Mitchell J, Rook A. *Botanical dermatology: plants and plant products injurious to the skin*. Vancouver: Greengrass, 1979.
3. Greenberg L A, Leser D. *Handbook of cosmetic materials*. New York, Interscience, 1954.
4. Menezes Brandão F, Hausen B M. Cross reaction between Disperse Blue dyes 106 and 124. *Contact Dermatitis* 1987; 16: 290-290.