



Figure 1. Hand dermatitis.

Contact with fuels is just one source of exposure to BHT, as this patient demonstrates. In a recent study in Denmark analyzing preservatives in registered chemical products, the total number of products containing BHT was found to increase from 2002 to 2005.⁴ We believe this patient may have potentially become sensitized to BHT from jet fuel exposure. On reexposure to BHT in his personal hygiene products, including the antifungal spray, he developed foot and recalcitrant hand dermatitis.

PEARL

This case highlights the importance of using personal protective equipment when handling jet fuels to avoid sensitization to chemicals also contained in personal hygiene products.

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Contact Dermatitis Following Exposure to Bird Excrement

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PRECIS

Through this case, we present an extremely rare dermatologic consequence of circumstance, which has never before been published.

DISCUSSION

A 48-year-old man presented to the dermatology clinic with complaints of a severely pruritic rash on his right upper extremity. Three days prior, the patient had been outdoors at an air show near Miami, Fla, when a flock of monk parakeets flew overhead and dropped a substantial amount of excrement on his bare arm. The patient quickly rinsed the excrement off and resumed his activities. Within 24 hours, however, he reported the development of “red-hot itchy pimples” in the distribution where the excrement had made contact with his arm and had been rinsed off. He attempted to treat the rash with various over-the-counter remedies with no relief. Of note, the patient denied recent exposure of the affected area to other possible contactants but did endorse a remote history of poison ivy dermatitis as a Boy Scout.

On physical examination, a deeply erythematous hemorrhagic papulovesicular rash was noted on the patient’s right lateral arm and forearm in a linear, nondermatomal distribution (Fig. 1). A punch biopsy of the involved skin revealed a superficial perivascular infiltrate of lymphocytes with focal areas of spongiotic vesiculation in the epidermis. Profound dermal edema created a subepidermal blister filled with extravasated erythrocytes and many eosinophils. Based on these findings, a diagnosis of allergic contact dermatitis was made. The patient was treated with fluocinonide 0.05% ointment applied to the rash twice daily for

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Figure 1. Linear distribution of erythematous excoriated papules and vesicles.

2 weeks, at which time he presented for follow-up, and a resolution of the rash was noted.

In theory, many components of bird excrement could lead to an acute dermatitis, including various allergens or even irritants such as uric acid. The clinical and histopathologic evidence in this case favors a diagnosis of allergic contact dermatitis, although a true distinction is usually possible only through skin patch testing. Unfortunately, the ability to patch test to urushiol was not available

at our institution. However, a tantalizing theory is that this patient experienced allergic contact dermatitis from Brazilian pepper fruit eaten and subsequently excreted by the monk parakeet.

Miami, Fla, our patient's home, has also been home to more than 70 species of exotic parrots since the 1920s,¹ the most abundant species of which is the monk parakeet (*Myiopsitta monachus*)—the same bird observed by our patient.¹ Monk parakeets in Florida tend to thrive in suburban areas where they typically feed in large flocks from bird feeders and lawns.¹ Their diet consists mostly of seeds and insects, although like all members of the parrot family Psittacidae, the nuts, fruits, and berries of exotic plants (such as Brazilian pepper) are a staple as well.²

Perhaps the most common exotic plant found in Florida is the Brazilian pepper (*Schinus terebinthifolius*), also known as Florida holly or Christmas berry.³ Notably, its dispersal is achieved primarily by birds (such as the monk parakeet) and mammals.³ As a member of the plant family Anacardiaceae, Brazilian pepper inherently contains urushiol and can therefore act as cross reactor to poison ivy. Other members of the Anacardiaceae family and other cross-reacting plants with similar dermatitic potential can be found in Table 1.^{4,5} As depicted in this case report, human contact with these plants may be otherwise enabled by the involvement of animal species, through seed dispersal or even direct physical contact (ie, pets' fur as a carrier of urushiol particles that then rub off onto upholstery or human skin).

TABLE 1. Members of the Anacardiaceae Family and Other Cross-Reacting Plants

	Binomial Name	Common Name	Chemical	Toxic Part
Anacardiaceae	<i>Toxicodendron radicans</i>	Common or Eastern poison ivy	Urushiol	Sap
	<i>Toxicodendron rydbergii</i>	Northern or Western poison ivy	Urushiol	Sap
	<i>Smodingium argutum</i>	South African poison ivy	Urushiol	Sap
	<i>Toxicodendron toxicarium</i>	Eastern poison oak	Urushiol	Sap
	<i>Toxicodendron diversilobum</i>	Western poison oak	Urushiol	Sap
	<i>Toxicodendron vernix</i>	Poison sumac	Urushiol	Sap
	<i>Anacardium occidentale</i>	Cashew nut tree	Resorcinols, urushiol	Nutshell oil
	<i>Mangifera indica</i>	Mango tree	Mangol (alkyl catechols and resorcinols)	Leaves, stems, fruit rind
	<i>Metopium toxiferum</i>	Poisonwood tree	Urushiol	Sap
	<i>Semecarpus anacardium</i>	Indian marking nut tree	Urushiol	Sap
	<i>Toxicodendron verniciflua</i>	Japanese lacquer tree	Urushiol	Sap
	<i>Gluta renghas</i>	Rengas tree	Urushiol	Sap
	<i>S. terebinthifolius</i>	Brazilian pepper tree or Florida holly	Alkyl phenols, cardol, urushiol	Sap
	<i>Ginkgo biloba</i> (Ginkgoaceae)	Ginkgo tree	Long-chain alkylphenols, urushiol	Leaves, flowers, fruit
	<i>Lithraea caustica</i>	Litre tree	Alkyl catechols, urushiol	Sap
Non-Anacardiaceae	<i>Mauria puberula</i>	Pepeo tree	Alkyl catechols	Bark
	<i>Grevillea</i> spp (Proteaceae)	Spider flower, silk oak, Kahili tree	Grevillol (resorcinol)	Sap, bark

Note: Sap may be found on any part of the plant, so it is important to be cautious when handling any of the above species.

ZEBRA

We alert practitioners to the previously unrecognized role of nonnative animal species in contact dermatitis.

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