

“Sign of the kiss” in dermatitis caused by vesicant beetles (“potós” or *Paederus* sp.)*

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Abstract: The cosmopolitan beetles of the *Paederus* genus (potós) cause a severe dermatitis when the insect is crushed against the skin of exposed areas (the cervical region is the most affected). Toxins (pederin and others) from the hemolymph of the insect cause plaques and/or bizarre, linear lesions with erythema, edema, blisters, pustules, crusts and exulcerations. There may be a burning sensation and severe conjunctivitis. Lesions disappear after 10 days and may leave hyperchromic macules. Treatment is made with topical corticosteroids and intensive washing.

Keywords: Poisonous animals, Beetles; Dermatitis; Poisons

Poisonous animals can provoke envenomations humans by passive release of toxins. Some beetles (Coleoptera) may produce and/or store vesicant toxins, such as the genera *Epicauta*, *Lytta* (Spanish fly) and *Paederus*.¹

The *Paederus* beetles or “potós” cause a severe dermatitis, especially in warm climate such as the Midwest and Northeast Brazil (Figure 1).^{2,3} These insects are cosmopolitan and were first associated with vesicular dermatitis by Pirajá da Silva in Brazil.⁴ The animal is crushed against the skin of exposed areas (the cervical region is the most affected) and toxins (such as pederin and others), which are present in the hemolymph of the insect, cause plaques and/or linear lesions with erythema, edema, blisters, pustules, crusts and exulcerations. There may be a burning sensation and severe conjunctivitis.



FIGURE 1: *Paederus* sp., the “potó”. This beetle is the most common vesicant beetle around the world

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FIGURE 2: Vesicant lesions in an area of healthy skin juxtaposed to damaged skin, which reproduces the lesions

Distribution is bizarre. Lesions disappear after about 10 days and may leave hyperchromic macules. In skin folds, the "sign of the kiss" can occur in an area of healthy skin juxtaposed to damaged skin. Vesicant lesions are reproduced due the contact with the toxins (Figure 2).

The "potó" dermatitis can be confused with herpes simplex, varicella-zoster, contact dermatitis or phytophotodermatitis.¹ Dermatologists should suspect the dermatitis in individuals with vesicles or pustules, who were in hot areas near lampposts, as in this case, in which a young woman slapped her arm as she "felt an insect" crawling on it. The treatment comprises washing with boric water, topical corticosteroids and antibiotics if bacterial infection is present.¹ In severe cases with multiple contacts, systemic corticosteroid therapy is indicated.¹ □

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