

Pruritic Papular Dermatitis From Bird Mites



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It was a usual morning when one of the authors (L.K.), a dermatologist, awoke with many extremely pruritic papules over her anterior and posterior trunk (Figure 1). Beside her was her husband (M.W.), an allergist/immunologist, who had no similar lesions that day. With the assistance of a pest control service owner (ST) with entomological knowledge and his entomologist colleague (JS), the diagnosis of bird mite dermatitis was made. Gamasoidosis (acarosis, avian-mite dermatitis or bird-mite dermatitis) can be distinguished from other arthropod bites.¹

Diagnosis is based on the gross morphology, severe pruritus, and presence of a recently abandoned bird's nest contiguous with the house. The pruritic papules of bird-mite dermatitis have other classical features that point to the diagnosis. The multiple, very pruritic papules occur over the trunk, proximal extremities, particularly in the folds of the elbows, and under clothes. In contrast, flea bites are most common in the distal lower extremities. Mosquito bites are predominantly in exposed areas. Scabies is characterized by tracklike burrows in the skin and lesions between the fingers. A particularly interesting characteristic of bird-mite lesions is the apparent selectivity where one individual gets multiple lesions and another in the same room or even the same bed is spared. Although the lesions have characteristics that can cause suspicion of bird mites, identifying the bird's nest in contact with the house is the *coup de gras*.

Bird mites are obligate blood feeders. The human body serves as a source of a blood meal once the nestlings and parent birds are no longer present. The oval-shaped mites are about 0.6 to 1.5 mm in length and look similar to other larger mites when magnified (Figure 2). Unable to fly, bird mites crawl to find a pathway inside. The mites appear to crawl up the walls, across the ceiling, and drop on a warm body below. A strong seasonality to bird-mite dermatitis is consistent with the bird hatching season. The pest control service owned by coauthor S.T. services about 30 cases/y in a large suburban area of San Diego County.

Treatment of the lesions is empirical with no published documentation for any specific therapy. Most important is managing the continued presence and further migration of mites. Removal of any bird's nests in contact with the house is essential. Mitigation must be performed to prevent the birds from returning to nest in that area. For a patient to achieve full recovery, the mites must be eradicated from the person's environment through the removal of nests and appropriate disinfection of infested areas by a pest control professional.²

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No funding has been received for this study.

Conflicts of interest: S. Tanksley is the current CEO of Pinpoint Pest Control. J. Shoemaker consults on urban and public health entomology. The rest of the authors declare that they have no relevant conflicts of interest.

Received for publication January 15, 2022; revised March 2, 2022; accepted for publication March 3, 2022.

Available online April 16, 2022.

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J Allergy Clin Immunol Pract 2022;10:1642-3.
2213-2198

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<https://doi.org/10.1016/j.jaip.2022.03.009>

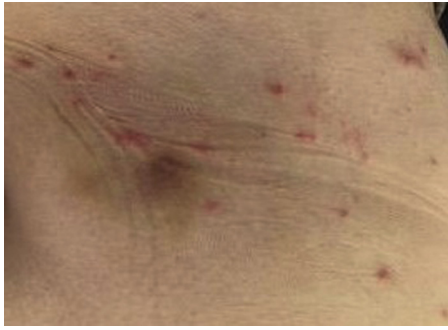


FIGURE 1. Bird mite bites resulting in pruritic papular lesions in the periumbilical area of LK.

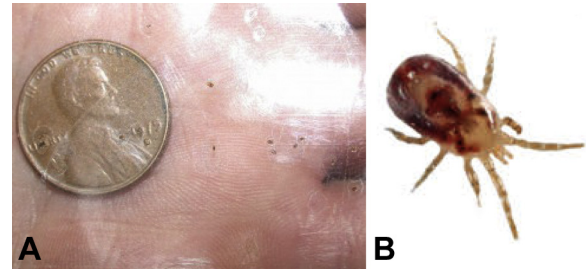


FIGURE 2. (A) Barely visible mites on a hand illustrate the small size of bird mites. (B) Bird mite magnified 100 $\times$.