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Argas reflexus (the Pigeon Tick) – A Household Pest

Sir,

The family of ticks includes two members: the Argasidae (the soft ticks) and the Ixodidae (the hard ticks) (1). All ticks can bite humans and transmit different germs (2). Cases of anaphylaxis due to a sting by Argas reflexus (the pigeon tick) have been reported (3, 4). To our knowledge, however, A. reflexus is not a vector of Borrelia burgdorferi.

In the case presented here, we diagnosed stings by A. reflexus based on the history of the sting, the presence of pigeons in the attic and the ticks which had been found by the patient (Fig. 2). It is concluded that A. reflexus is a household pest.

CASE REPORT

A 45-year-old Caucasian man living in Munich, Germany, developed overnight a painful, 8–5 cm large infiltrated erythematous extremely itching lesion on the left buttock. At the centre of the lesion a sting was visible (Fig. 1). Some stings had been followed by a systemic reaction with fever during the last years. All serological examinations, including antibody measurement against B. burgdorferi, were normal.

The man reported that in the last years a lot of pigeons had had nests in the attic.

DISCUSSION

The Argasidae consist of four species: A. reflexus, A. persicus, A. humpit and A. vespertilionis. The last two species occur in Africa, whereas A. reflexus and A. persicus were found elsewhere. Members of Argas are characterized by their flattened bodies, their thin lateral margins and their leathery integument (Fig. 2). A. reflexus is found as an ectoparasite on snakes, lizards, turtles, many birds and some mammals. It hides in the nests or near the roosts of their hosts during the day. The females lay their reddish brown eggs in clumps of 25 to 100. The hatched larvae seek a host. They usually remain attached, feeding for a few days before dropping off to molt to the first-stage nymph. In 10 to 12 days, the second molt occurs, and the second nymphal instar is attained. There are three to four such molts, each one sandwiched between feedings. Finally, the adult form is attained. At night the nymphs and adults are extremely active, climbing onto their hosts and engorging themselves with blood. Frequently they attack humans, produ-
cing painful wounds that are subject to secondary infection (2). The adult males are approximately 5 mm long and 4.5 mm wide, and the females are 8.5 mm long and 5.5 mm wide (Fig. 2). It is possible that A. reflexus can survive for several years without biting humans or animals (4).

The Ixodidae are the vector of B. burgdorferi, but up to now all reports have shown that the family of Argasidae cannot transmit this type of Borrelia (5). Fabbi et al. found no serological evidence that B. burgdorferi can infect pigeons (6). However, A. persicus and A. reflexus are the vector of different other germs, for example B. gallinarum, the causative agent of avian spirochaetosis. The symptoms of this disease are diarrhoea, loss of appetite, convulsions and eventually death (1).

Recently, Dal Monte & Pajello (3) and Laubstein et al. (4) reported cases of anaphylaxis due to a sting by A. reflexus.

Since there is no good way of exterminating A. reflexus in houses without doing harm to humans, it is concluded that A. reflexus represents a household pest.

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