

DERMATITIS IN MAN AND IN A DOG CAUSED BY THE MITE *CHEYLETIELLA YASGURI* SMILEY

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Summary.—The authors have observed an itching dermatitis of 9 months duration in the 3 members of a family in the Netherlands. The source of the itch appeared to be a mangy dog that lived in contact with the family and was heavily infested by the mite *Cheyletiella yasguri* Smiley. All the symptoms disappeared quickly in both the family and the dog after treatment with an acaricide.

THE diagnosis of animal scabies in man is rarely made. However, infestations with animal ectoparasites seem to be of greater importance than previously was believed (Fain, 1968, 1969; Hewitt *et al.*, 1971).

The morphological diagnosis is less easy than in human scabies, in which there is such a typical clinical picture, for animal scabies may evoke a wide diversity of cutaneous responses in man.

When several members of a family complain of an itching eruption and there is also a scratching pet animal, examination of this animal will probably provide the key to the solution of the problem.

CASE REPORT

A family consisting of father aged 53, mother aged 31, and daughter aged 8, living in Rotterdam, came to the out-patients' department of Dermatology, all complaining of severe itching on the trunk for 9 months.

The daughter was the first to complain, but soon both father and mother also developed severely pruritic eruptions, which began at approximately the same time. The family owned a dog (a boxer) which had suffered from "dandruff" for 5 months and had been scratching for 9 months. The patients were treated by the family doctor with creams and a diet. A dermatologist who was consulted prescribed ointments and tablets, but the symptoms persisted. During a holiday (without the dog) in the Canary Islands they were totally free of symptoms; on their return home, the itching and skin lesions re-appeared. The dermatologist discovered parts of mites in material from a lesion and treated the family with an acaricide, but after 3 or 4 weeks new lesions appeared. On examination at our clinic the findings were:

Mother: anterior region of the trunk, papules surrounded by slight erythema; buttocks, papules, excoriations and hyperpigmented macules.

Daughter: abdomen, some excoriated papules; buttocks, papules and excoriations; dorsum of the left hand, 2 papules.

Father: anterior region of the trunk, and buttocks, papules and excoriations.

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Burrows, as in human scabies, were not found. We could not demonstrate mites in scrapings from the lesions. Skin scrapings from the dog consisted of crusts, hair and many living mites (just visible with the naked eye). Under the dissecting-microscope we saw mites (Fig. 1), different from *Sarcoptes scabiei* (Fig. 1).

The dog was treated by a veterinary surgeon with gamma benzene hexachloride lotion and, after 4 days, was free of symptoms. The family was treated with benzyl benzoate emulsion and, after 1 week, they were free of itching and skin lesions. The interior of the house was sprayed with an insecticide.

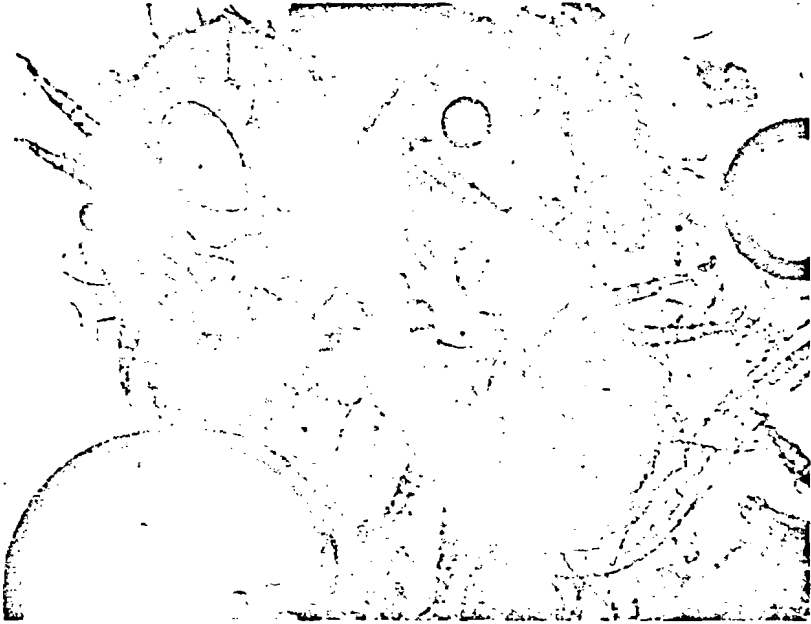


FIG. 1.—*Cheyletiella yasguri* Smiley. Females (one gravid) in ventral view.

We observed that these mites could survive for almost 2 days away from the host; the last living mite was seen after 42 hours. The mites found on the dog were identified by one of us (A.F.) as *Cheyletiella yasguri* Smiley.

DISCUSSION

The mite *Cheyletiella yasguri* (Smiley, 1965) was described in the U.S.A. The type specimens were collected from Schnautzer pups in Mamaroneck, New York, in 1963. The mites had produced a superficial scurf at the base of the tail. Other specimens were also found on an adult mangy dog at Cornell University, Ithaca, New York, in 1962. The species has been named after Dr I. Yasgur, who found the mites.

Kuscher (1940) and Kutzer (1963) have recorded mange in dogs produced by a related species, *Cheyletiella parasitivorax* (Megnin, 1878).

Cheyletiella parasitivorax is a common and cosmopolitan parasite of the fur of rabbits. It has been found occasionally on cats, in which animal it may be associated with mange. Several cases of human itching dermatitis have been recorded

in persons in contact with such infested cats. In all these cases the itching disappeared when the animals had been treated with acaricides (Baker *et al.*, 1956).

Recently Rack (1971) has recovered *Cheyletiella yasguri* from 2 mangy dogs in Germany. The owners of these dogs showed an itching dermatitis which was attributed to contact with the parasitized animals. Rack surmised that all the cases of mange in cats, dogs and men recorded so far in the literature and attributed to *Ch. parasiticorax*, were in fact caused by *Ch. yasguri*.

Our observation in the Netherlands provides a further example of the pathogenicity of *Ch. yasguri* for dogs and men.

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