Cheyletiella are nonburrowing mites characterized by hooked anterior palps (Figure). These mites have a worldwide distribution, and Cheyletiella dermatitis in human beings results from contact with an affected animal: Cheyletiella blakei affects cats, Cheyletiella parasitivorax is found on rabbits, and Cheyletiella yasguri is found on dogs. In animals, contact with Cheyletiella mites produces a subtle dermatitis sometimes referred to as walking dandruff. Animals are commonly asymptomatic, and up to 50% of rabbits in commercial colonies may harbor Cheyletiella or other species of mites. The typical human patient with Cheyletiella dermatitis is female, aged 40 years or younger, and presents with pruritic papules. Papules commonly are grouped but may be widespread. The diagnosis of Cheyletiella dermatitis may be challenging because it is uncommon to find the mite on a human with this condition. Therefore, a high index of suspicion is required.

Bullous eruptions caused by Cheyletiella mites may mimic those found in individuals with immunobullous disease. Children may experience explosive dermatitis after nappling where the family dog sleeps. Farmers and veterinarians are especially vulnerable to zoonotic mite-induced dermatitis. Various diagnostic techniques are used to help identify Cheyletiella infestation in an affected animal. Adhesive tape preparations may demonstrate the mites, and a rapid knockdown insecticidal spray, marketed for use on the animal, will facilitate collection of mites when sprayed on areas of pet “dandruff.” Sprays with a pyrethrin and piperonal butoxide base have been used for this purpose but may be toxic in some animals. A veterinarian should direct the search for mites. The scaly area is carefully brushed with a toothbrush or fine-toothed comb, and all scale, crust, and hair collected is placed in a sealable plastic bag. When alcohol is added to the bag, most contents will sink, but the mites tend to float. Vacuum cleaners fitted with inline filters also are used to collect mites. The filter samples are treated with hot potassium hydroxide then floated in a concentrated sugar solution to collect the ectoparasites. A knowledgeable veterinarian is the physician’s best friend when a zoonotic infestation is suspected.

Ectoparasitic dips or shampoos have been used to treat Cheyletiella infestation in affected animals. Fipronil, in a spray pump, applied to the animal, has been used in conjunction with perme thrin spray applied to the environment to treat canine cheyletiellosis.

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used to treat canine scabies, also can be effective for treating Cheyletiella infestation. A veterinarian always should be consulted to evaluate and treat the affected animal.

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