A Papulovesicular Rash in a Farmer and His Wife
(See page 352 for the Photo Quiz)

Figure 1. Direct light microscopy of skin scraping samples obtained from the cows revealed *Sarcoptes scabiei* var. *bovis* (original magnification, ×25).

Diagnosis: infestation with *Sarcoptes scabiei* variant *bovis*.

*Sarcoptes scabiei* var. *bovis* was isolated from skin scraping samples obtained from the cows (figure 1). In addition, multiple eggs and scybala were found on direct microscopy. Antiscabious treatment of the animals was performed. The pruritus of both patients spontaneously resolved within 3 days after treatment of the animals. The rash disappeared within 1 week.

Infestation with *Sarcoptes scabiei* var. *bovis* (cattle itch mite) can produce a pruritic rash in humans (figure 2), which generally manifests 24–96 h after contact with the affected animal (figure 3) and is also known as “dairyman’s itch” [1]. Typical lesions are papules and papulovesicles with central excoriation. The rash is not restricted to spots of direct contact with the affected animal. Man is an inadequate host. Persistent lesions result from reinfestation [2]. In our case, other members of the family were not affected, because they were not directly involved in the care of the cows.

*Sarcoptes scabiei* var. *bovis* penetrates the human skin. The mite lies subcorneally, but it does not multiply in human skin [2]. This corresponds with our clinical findings. Skin scraping samples obtained from humans are generally negative on direct light microscopy, and antiscabious treatment of the patient is not effective. Infestation with cattle itch mite may be distinguished clinically from infestation with human itch mite by the lack of burrows, as well as by the lack of a secondary hyperergic eczema, which is typically found in human scabies [3].

Human infestation with animal scabies may also result from close contact with dogs, cats, and other pets [1]. The clinical features are similar in all cases. Because generally only skin scrapings from the affected animal are positive, the correct diagnosis requires a high index of suspicion.

Figure 2. Photograph of a farmer who presented with a papulovesicular rash.

Figure 3. Photograph showing patches of hair loss on one of the farmer’s cows.
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References


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