THREE CHILDREN with the same skin disorder are pictured. A 3-year-old boy presented with a 5-day history of an enlarging, intensely pruritic lesion of the left foot (Figure 1). Fourteen days before, he had returned from a 4-week trip to Florida where he visited his grandmother, who owns 16 cats. He walked barefooted both in his grandmother’s home and on a nearby beach. An 11-year-old girl who had recently returned from a trip to North Carolina had a similar pruritic lesion on her left foot (Figure 2).

A pruritic lesion appeared on the buttck of an 18-month-old child who had visited Venezuela (Figure 3).
Denouement and Discussion

Cutaneous Larva Migrans (Creeping Eruption)

The eruption usually begins with an inflamed papule, often between the toes. The tracks of the larvae’s path through the skin are often seen within the first 2 weeks of the patient’s return from a tropical environment. The lesions are the result of cutaneous infestation and migration by third-stage larval nematodes of the cat and dog hookworms, Ankylostoma braziliensis and Ancylostoma duodenale, and occasionally other hookworms. Adult worms live and multiply in the animal’s intestine and are shed during defecation. The infection is acquired by humans when they walk barefooted or crawling in sandy or shady areas, particularly around beaches and under houses. Confirmation that the affected body part was exposed to contact with sand or soil can usually be elicited by obtaining a history.

Animal infestations with hookworms are most common in the Caribbean, South America, Southeast Asia, and the southeastern United States. A recent history of travel to a tropical or subtropical climate should be sought when one is confronted with a lesion suspected of being creeping eruption. In a report from a tropical disease unit in Toronto, Ontario, 75% of the 60 affected individuals had a history of recent travel to the Caribbean, while only 3.3% had recently visited Florida. Family outbreaks have been reported when household pets are infested.

CLINICAL FINDINGS

The eruption usually begins with an inflamed papule, often between the toes. The tracks of the larvae’s path through the skin are often seen within the first 2 weeks of the patient’s return from a tropical environment. While the dorsal and plantar surfaces of the feet are most commonly affected, other areas such as the hands, buttocks, thighs, and chest may occasionally develop lesions.

On presentation there may be single or multiple serpiginous tracks that enlarge 1 to 2 cm per day. The larvae enter the skin through breaks in the surface, through hair follicles, or even through intact skin. The larvae cannot complete their life cycle in the human and are trapped in the epidermis, leaving an erythematous plaque in their path. Vesicular and bullous lesions, erosions, and folliculitis may be seen.

The lesions of cutaneous larva migrans are classic, and when combined with a supportive history of possible exposure, the picture is diagnostic. Occasionally lesions may be mistaken for fungal infections or inflammatory dermatoses. Pruritus is intractable and may be related to eosinophilia or elevated levels of IgE, which may be persistently abnormal up to 4 weeks after treatment of the infestation. Pain and local swelling may also be present.

TREATMENT

The treatment of choice in the United States is the cutaneous application of 10% to 15% thiabendazole cream, made by crushing a 500-mg tablet of the drug in 5 g of a water-soluble cream, or the use of oral thiabendazole suspension topically. The cream or suspension is applied to the lesion, particularly ahead of the advancing edge, 3 or 4 times a day. Oral thiabendazole at a dose of 25 to 50 mg/kg for 2 to 4 days is useful for cases resistant to topical therapy, but it is associated with many side effects, including dizziness, nausea, vomiting, and diarrhea. Alternatively, oral albendazole as a single 400-mg dose or 200 mg twice daily for 3 days may be given. While clearance of the infestation is comparable between the 2 oral regimens, single dosing is associated with a higher incidence of relapse. Ivermectin, recently approved for use in adults for the treatment of resistant scabies, was shown in one study to be effective in a single 12-mg dose. Local destructive therapies, such as with liquid nitrogen, have not been found to be effective.

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REFERENCES