

Creeping Eruption

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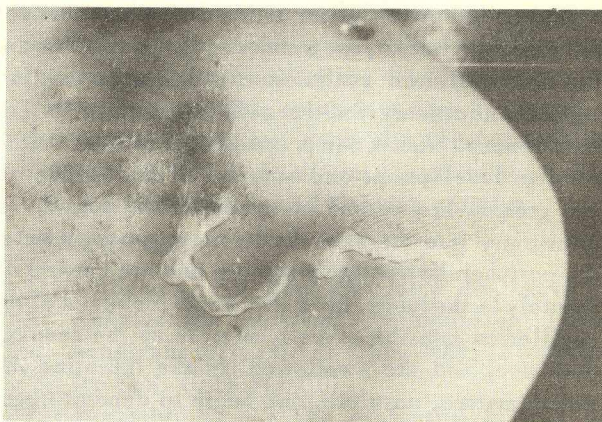
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Creeping eruption is a skin disease which occurs in at least 12 of the southeastern States, particularly in coastal areas, where it is associated with a damp-sand type of soil. The greatest number of cases have occurred in Georgia, Florida, and Texas with reported infections as far north as Maryland and New Jersey. Although creeping diseases of the skin reportedly have been caused by fly larvae (*Gastrophilus*, *Hypoderma*), by ants, by mites, and by certain larval nematodes (*Gnathostoma*), the most common causative agent in the United States appears to be the third stage or filariform larva of the dog hookworm, *Ancylostoma braziliense*. Early workers recommended, therefore, that the term "creeping eruption" be used specifically for this infection.

CLINICAL ASPECTS

Clinical descriptions of creeping eruption by various authors are remarkably similar. Invasion usually takes place on the hands or feet, but lesions may be found on any part of the body. Plumbers and carpenters frequently are infected on the back and buttocks. At the site of penetration of the larvae, reddish itching papules develop within a few hours. In 2 or 3 days, erythematous tracks which mark the paths traversed by the worms extend out from the papules. Later these tortuous or serpiginous subepithelial tunnels are indicated by slightly elevated lines which become vesicular and then develop dry and crusty surfaces. Because of the typical linear lesions, physicians have stated there is little difficulty in differentiating creeping eruption from scabies, ground itch, ringworm, and other inflammatory conditions of the skin. Intense itching of these lesions leads to scratching and thus often to complicating secondary bacterial infection. In severe cases the itching may result in loss of appetite, insomnia, and reduced vitality. The rate of migration of the larvae in the skin varies from a fraction of an inch to several inches daily and may continue for days, weeks, and even months.

Some individuals may experience self-cures in a relatively short time without specific treatment. In others, however, the lesions continue to develop for long periods of time and often are quite refractory to treatment of any sort. It has been observed that injudiciously repeated topical treatments may cause irritation and even necrosis of the skin, resulting in conditions which are even more severe than the original infection. Successful treatment of creeping eruption seems best accomplished by local freezing with ethyl chloride spray or carbon dioxide snow. There is no evidence that the systemic administration of heavy metal drugs such as fuadin or tartar emetic has any specific action on the larvae.



Typical lesions of creeping eruption. For photographs of creeping eruption exhibits, see CDC Bulletin IX (9), 6-7, September 1950.

BIOLOGY OF THE DOG HOOKWORMS

The adults of *A. braziliense* are intestinal parasites of dogs and cats where they are frequently associated with another hookworm, *Ancylostoma caninum*. Although intestinal infections of man with *A. braziliense* have been reported, particularly in the Orient, such infections are extremely rare in this country. Because of the occurrence of cases of creeping eruption which appear to have been acquired in areas where dogs and cats are prohibited,

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