

Cuterebra in Dogs, Cats, and Ferrets

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Cuterebriasis is a condition in which the larvae of the *Cuterebra* fly develop under the skin.

What is the life cycle of *Cuterebra*?

Cuterebra is a large, bee-like fly that lays its eggs on soil, stones or plants, often near the entrance to dens, or close to burrows. As an animal brushes against the stones or plants, the eggs stick to the animal's fur. The eggs hatch, and the larvae either penetrate the skin, are ingested when the animal grooms, or they enter the animal's body through a natural opening, such as the nose.

Do not attempt to remove a *Cuterebra* larva yourself.

In most cases, the larvae migrate to areas just under the skin on the head, neck, or trunk of the animal. In dogs, cats, and ferrets, who are not the usual hosts of this parasite, the larvae may also migrate to the brain, eye, eyelids, or throat.

As a larva matures under the skin, it becomes very large (up to ½ inch in length) and produces a nodule or swelling. A small opening develops in the skin, through which it breathes. A small amount of drainage may occur around this breathing hole.

How is cuterebriasis diagnosed and treated?

The swelling is commonly observed by the owner, who may think it is a small tumor. These swellings usually appear in the late summer and fall. When the animal is examined by a veterinarian, the area over the swelling is clipped, and the telltale opening will be seen. In some cases, the larva can be seen through the hole. Younger larvae are gray in color and have short rows of spines. Mature larvae are dark in color, and covered with spines.



Extreme care is used to remove the larvae. An incision is made through the skin, and the larva is carefully removed. If the larva is cut or crushed, the animal may develop an anaphylactic reaction or severe skin irritation at the site. The "pocket" that was formed around the larva is cleaned and flushed, and a topical antibiotic ointment may be prescribed. The thickening of the skin takes considerable time to resolve.

If the larva is not surgically removed, it will continue to enlarge and ultimately break through the skin and fall to the ground where it continues its life cycle by developing into a pupa, and then an adult.

Photo courtesy of the Entomology Department of the University of Nebraska.