

Ringworm

Ringworm is a skin disease caused by a fungus (plural: fungi). Because the lesions are often circular, it was once thought to be caused by a worm curling up in the tissue. However, there is no truth to that; it has nothing to do with a worm.

There are several fungal species affecting animals, which can cause the disease. These may also affect humans.

Incubation Period

The incubation period is 10-12 days. This means that following exposure to the fungus, about 10-12 days will pass before any lesions occur.

Diagnosis

Diagnosis is made in one of 3 ways:

1. Identification of the typical "ringworm" lesions on the skin
2. Fluorescence of infected hairs under a special light (however, only 2 or the 4 species of fungi fluoresce)
3. Culture of the hair for the fungus. The last method is the most accurate, but it may take up to 2-3 weeks for the culture to become positive.

Transmission

Transmission occurs by direct contact between infected and non-infected individuals. It may be passed from dogs to cats and visa versa. It may also be passed from dogs or cats to people and visa versa. If your child has ringworm, he or she may have gotten it from your pet or from another child at school. Adult humans usually are resistant to infection unless there is a break in the skin (a scratch, etc.), but children are quite susceptible. Also, the infection can be dangerous to humans who are immuno-compromised. If you or your family members have suspicious skin lesions, check with your family physician.

Transmission may also occur from the infected environment. The fungal spores may live in bedding or carpet for several months. They may be killed with a dilution of chlorine bleach and water (1 cup of chlorine bleach in a gallon of water) where it is feasible to use it. The home should be thoroughly vacuumed (especially where the pet sleeps) and the vacuum bag disposed of outside.

Cats can be carriers without having any clinical signs. If there is a recurring problem in the household, the veterinarian can gather fur and dander from the cat for testing, and if positive the cat can be treated to stop the infection.

Treatment

There are several means of treatment. The specific method(s) chosen will depend on the severity of the infection, how many pets are involved, if there are children in the household, and how difficult it will be to disinfect your pets' environment.

Topical antifungal medication. Apply one of these products to the affected areas once daily for 10 days. Do not risk getting it in your pet's eyes by treating lesions very near the eye.

Baths using an antifungal shampoo. A bath should be given 3 times on an every other day schedule. Bathe exposed but unaffected pets once. These baths are important in getting the spores off the hairs so they do not drop into the environment and result in re-exposure. Lather should be formed and left on for 5 minutes before rinsing.

Lime Sulfur Dip. This should be done twice weekly for the first two weeks then once weekly for 4-6 weeks. Lime sulfur dip should also be applied to other pets (dogs or cats) in the household to prevent them from being affected. If they develop ringworm lesions, they should begin on griseofulvin. You should wear gloves when applying the dip. This is an effective form of treatment, but the dip has an objectionable odor and can tarnish jewelry.

Griseofulvin. This is a tablet that is concentrated deep in the hair follicles where it can reach the site of active fungal growth. Griseofulvin should be given daily. Animals should receive the tablets for a minimum of 30 days. At that time, your dog should be rechecked to be sure that the infection is adequately treated. Tablets are best absorbed with fat, such as a rich canned food or a small amount of fat trimmings from meats or some rich cream. This is the most important part of the treatment. If you are not successful in giving the tablets, please call us for help.

Initial Results of Treatment

Treatment will not produce immediate results. The areas of hair loss will get larger before they begin to get smaller. Within 1-2 weeks, the hair loss should stop, there should be no new areas of hair loss, and the crusty appearance of the skin should subside and the skin look more normal. If any of these do not occur within two weeks, your dog should be checked again.

Duration of Contagion

Infected pets remain contagious for about 3 weeks if aggressive treatment is used. Contagion will last longer if only minimal measures are taken or if you are not faithful with the prescribed approach. Minimizing exposure to other dogs or cats and to your family members is recommended during this period.

Treating Exposed Dogs and Cats

Ringworm is contagious from dogs to other dogs and to cats. If the exposed pets do not have any skin abnormalities, including hair loss, they should be treated for 10 days. If skin lesions develop during those 10 days, treatment is extended until the fungus is gone.

A Possible Carrier State

When treatment is completed, ringworm should be cured. Although a carrier state can exist, this usually occurs because treatment is not long enough or aggressive enough or because there is some underlying disease compromising the immune system.