

Trichophyton Mentagrophytes

Trichophyton mentagrophytes is a species of fungus that is a communicable pathogen; it affects both animals and humans alike. *T. mentagrophytes* are found in a variety of environments, and infections can take several forms.

Mycology

Trichophyton is known as a dermatophyte; part of a group of three genera of fungi that cause skin disease in people and animals. In many parts of the world *Trichophyton mentagrophytes* is isolated most frequently. *T. mentagrophytes* is typically found in moist, carbon-rich environments. It is characterized by flat suede-like colonies with a white to cream color and distinctive odor. The color on the underside of the colonies is usually a yellow to reddish brown color. The granular colony form typically has a powdery appearance due to the large amount of microconidia (spores) formed. The macroconidia are smooth, cigar shaped and thin walled with 4-5 cells separated by parallel cross-walls. In comparison to other fungi *T. mentagrophytes* grows fairly rapidly.

Clinical Signs

In animals, *T. mentagrophytes* infection can manifest as ringworm. Ringworm can cause a scaly, crusted rash that may appear as round, red patches on the skin. Other symptoms and signs of ringworm include:

- Patches of hair loss
- Scaling on the scalp
- Itching
- Blister-like lesions

Epidemiology of Transmission

Animals, like people, get infected through touching an infected animal's skin or hair or by touching things that are infected with *T. mentagrophytes*, like blankets, towels as combs, brushes, furniture, linens etc. The greatest risk factor for acquiring infection is contact with damaged cells on skin, hair and nails.

Treatment and Control

Treatment of ringworm caused by *T. mentagrophytes* depends on the severity of the infection. A veterinarian may prescribe a medicated shampoo, ointment or a dip to kill the fungus. In some cases, oral medications are necessary to cure ringworm. In severe cases, it may be necessary to use a topical and oral treatment, in addition to clipping away the fur. Once treatment begins, lesions should begin to heal in about one to three weeks

In order prevent the spread of infection to other animals and humans, an EPA or Health Canada approved disinfectant with a fungicidal claim will be effective at inactivating fungal spores. Direct contact with infected animals and related fomites should be minimized. If contact with infected areas of skin or infected animals is unavoidable, wash hands immediately after exposure. Wash/change bedding as frequently as possible- as shed skin may also spread infection. As soon as infection is suspected seek medical attention.

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