

What is Dermatophytosis?

- Dermatophytosis, a superficial skin disease, is the most common fungal infection in cats.
- Over 90% of cases are caused by *Microsporum canis*.
- The disease is seen mostly in kittens or immunosuppressed adults.
- In catteries and shelters, especially in a poor environment, the disease may be endemic and its eradication may be very difficult.
- Dermatophytosis may be transmitted to other animal species and to humans, especially children.

Infection

- Dermatophytosis is spread mainly by direct contact with an infected cat.
- Many adult cats are asymptomatic carriers of *M. canis*.
- This fungus produces arthrospores that are shed on broken hairs or scales. They may remain infective for about a year and are easily transmitted by direct contact or on dust particles, blankets, bedding, toys, brushes, clothes and other fomites.
- Factors predisposing to disease development include: young age (< 2 years), skin trauma (scratches, ectoparasites), immunosuppression (e.g. due to social stress in overcrowded facilities), high environmental temperatures, high humidity and nutritional deficits.

Clinical signs

- The typical presentation is regular and circular alopecia, with hair breakage, desquamation and sometimes an erythematous margin and central healing ('ringworm').
- The lesions are sometimes very small, but occasionally may have a diameter of 4-6 cm. They may be single or multiple, and are localized often on the head.
- Pruritus is mild to moderate, and usually no fever or loss of appetite is observed.
- In many cats the disease is self-limiting, with only hair loss and scaling.
- In young animals and immunosuppressed adults, the outcome may be a multifocal or generalized skin disease.

Diagnosis

- As dermatophytes produce lesions similar to many feline skin diseases, they should be considered as a differential diagnosis in all cats with cutaneous disease.
- The gold standard to confirm dermatophytosis is culturing the fungus on Sabouraud agar from hair or scales collected from new lesions.
- Wood's lamp examination and microscopic detection of arthrospores on hairs (such hairs are thicker, with a rough and irregular surface) are less sensitive.

Disease management

- In immunocompetent cats isolated lesions disappear spontaneously after 1-3 months and may not require medication.
- Topical treatment (twice-weekly body rinse with an enilconazole solution or miconazole with or without chlorhexidine, preferably after clipping) will speed the recovery, and is the only way to kill spores on the hair coat.
- In severe cases this should be combined with systemic treatment lasting at least 10 weeks. Itraconazole is the drug of choice, terbinafine an alternative.
- In catteries and shelters, medication should be preferably applied to all cats (also those subclinically infected), and must be accompanied by intensive cleaning and decontamination of the environment. Fomite carrier cats (lesion-free, Wood's lamp negative and negative on repeat fungal culture) should be decontaminated by topical treatment only.

Prevention

- Safe and efficient vaccines against dermatophytosis for cats are unavailable; the ABCD does not recommend vaccination against this disease.



Image courtesy of Tadeusz Frymus

- In some cats, especially immunocompetent adults, the only signs of dermatophytosis may be scaling.

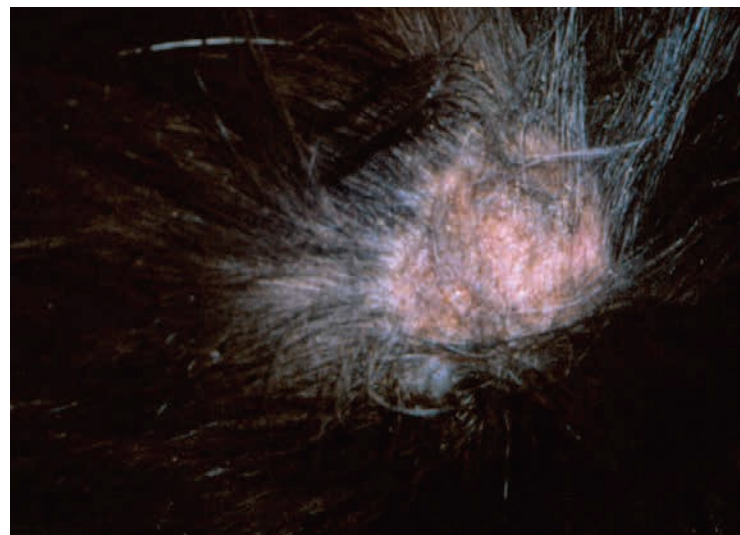


Image courtesy of Tadeusz Frymus

- Circular alopecia caused by *M. canis*.



Image courtesy of Tadeusz Frymus

- External sides of the pinnae may also be affected by dermatophytosis.

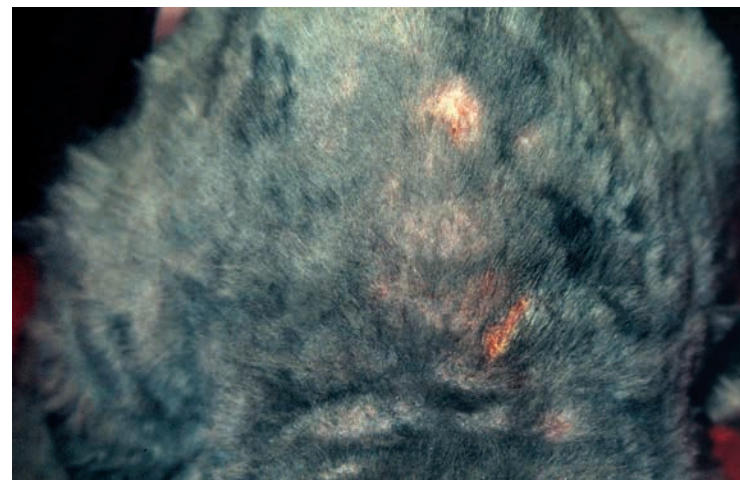


Image courtesy of Tadeusz Frymus

- Some dermatophytosis lesions may become visible only after clipping.