
RINGWORM (TINEA CORPORIS)

WHAT IS RINGWORM?

Ringworm (tinea corporis) is a **fungal infection** of the skin. It starts as a round spot that slowly enlarges. The edge of the spot is red and flaky. The spot looks like a ring, hence the name ringworm. It has nothing to do with worms. The medical name for ringworm is **tinea corporis** or **dermatomycosis corporis** (fungus on the body), and fungal skin infections are also called **mycoses**.

HOW DOES RINGWORM DEVELOP?

Ringworm occurs when fungi get on the skin. The fungi that cause ringworm are called **dermatophytes**. These dermatophytes live on the top layer of the skin, the stratum corneum. They cannot grow deep, but they can penetrate hair follicles. There are several types of fungi that can cause ringworm. The most common species is called *Trichophyton rubrum*; other species include *Trichophyton tonsurans*, *Mycosporum canis*, and *Epidermophyton floccosum*. Besides ringworm, fungi can also cause other skin conditions, such as athlete's foot, toenail fungus, or a fungal infection of the scalp (see fungal skin infections).

HOW CAN YOU GET A FUNGAL INFECTION?

Fungi are everywhere. They spread through fungal spores, tiny spheres that can be found in all sorts of places. These spores can survive long periods under difficult conditions, even surviving a 40-degree wash in the washing machine. Fungi are easily contracted, for example, by walking barefoot in gyms, swimming pools, and other public spaces. A fungal infection is usually contracted through contact with a person or animal with a fungal infection. Children can contract it from other children at school or daycare. Sometimes there is an epidemic of fungal infection of the scalp (tinea capitis) at school. The fungi that cause this (*Trichophyton tonsurans*, for example) can also cause ringworm in parents or the child itself. Some fungi, such as *Microsporum canis*, are transmitted by pets (dogs). There are also fungi that live in the soil. Fungi thrive in warm, moist conditions.

WHAT DOES IT LOOK LIKE?

Ringworm appears as a circular spot on the body. The edge is slightly raised, red, and scaly. The spot gradually grows larger. It causes itching or a burning sensation. If left untreated, they can become very large.



WHO CAN GET RINGWORM?

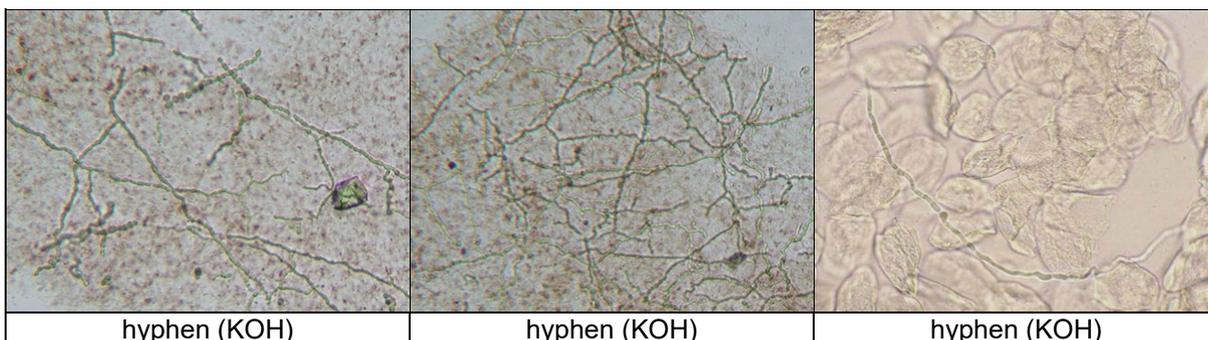
In principle, anyone can get a fungal infection. But it's most common in children and young adults. Parents of children with ringworm can also get it. People with a weakened immune system and people with diabetes are more susceptible. Patients with eczema or psoriasis who apply anti-inflammatory creams or ointments to their skin (topical corticosteroids) can also get fungal infections more easily.

IS RINGWORM CONTAGIOUS TO OTHERS?

Yes, ringworm is contagious. Family members can become infected, but this doesn't happen very often. Sometimes an entire family becomes infected with ringworm if there are puppies (young dogs) in the house with ringworm. It can also occur after visiting a petting zoo. By practicing good hygiene (washing hands) and avoiding contact with areas suspected for ringworm, infection can be prevented.

HOW IS THE DIAGNOSIS MADE?

The diagnosis is usually made based on the clinical picture, i.e., the appearance. Sometimes, a sample is taken for examination under a microscope (KOH preparation) or to be cultured for fungi in the laboratory. Occasionally, a skin biopsy is performed. It can sometimes take several weeks for the results of a fungal culture to be available.



HOW IS RINGWORM TREATED?

Fungi are treated with an antifungal medication (antifungal). These are available as topical products (creams, lotions, ointments) and as oral tablets. In the case of ringworm, it's usually possible to treat it with a topically applied antifungal cream. Apply the cream to the affected area and a 2-centimeter border twice a day for at least two weeks.

Antifungal creams are available with a prescription from your GP or dermatologist. There are also antifungal creams you can buy over the counter at a drugstore or pharmacy. One example is miconazole cream. Note, however, that not every round, scaly patch is ringworm; there are other skin conditions that can look very similar. If in doubt, a visit to a dermatologist is necessary.

If the treatment doesn't help sufficiently, or if it's a widespread fungal infection, it is an option to start taking antifungal tablets (systemic antifungals). The most commonly used are itraconazole capsules (take 100 mg once daily for 2 weeks) and terbinafine tablets (take 250 mg once daily for 2-4 weeks). These tablets are also used in patients with a compromised immune system. Treatment with itraconazole or terbinafine is usually well tolerated and causes few side effects. If you have ever had liver problems, it's wise to have your blood tested occasionally.

Topical antifungal products

- clotrimazole
- miconazole
- terbinafine
- ciclopirox
- sulconazole

Oral antifungal products (systemic antifungals)

- terbinafine
- itraconazole
- fluconazole.

WHAT IS THE PROSPECT?

After treatment, the fungal infection disappears completely without leaving a trace. It is possible to become infected again later in life.

WHAT CAN I DO?

If you have a ringworm infection, it is important to maintain good hygiene. Try not to scratch the red spots. Wash your hands regularly to prevent other people around you from becoming infected with the skin fungus. If you discover ringworm in a pet, it is advisable to visit the vet and ask for an anti-ringworm medication. The pet can infect you or others.

