

Tinea Corporis and Tinea Ungium— Fungal Skin Infections



Some fungi are harmless—like certain mushrooms that are edible—but some fungal species can cause severe, even life-threatening conditions. Certain fungal species called *dermatophytes* can cause infections on the surface of the skin, but these infections are rarely severe and are generally treated successfully.

Fungal skin infections

Tinea is the medical name of the fungal infection that may affect the nails, scalp, feet, groin, and body surface skin. While each of these body areas can be affected, the name of the infection is unique and corresponds to the specific body area. These fungi thrive in warm, moist, and humid places, in the environment and on people and animals.



Tinea is the medical name of the fungus that causes skin infection. Commonly called ringworm, it is spread by contact, and can affect the skin surface, nails, hands, scalp, groin and feet.

Tinea corporis (*corporis*—Latin for body)

This fungal infection, commonly called ringworm, can occur anywhere on the body and looks like red rings with clear, skin centers. Several of these ring-shaped areas may develop and can be raised, flaky, and are typically itchy. Transmission of ringworm occurs through direct contact with an object, surface area, another person, or animal, that is affected with the fungal infection.

These infections can occur in both healthy people and those with a lowered immune system, especially anyone who uses communal baths, is involved in contact sports, and who lives in close contact with animals. Outbreaks of fungal skin infections can also occur in schools, households, and institutional settings.

Tinea unguium and tinea pedis

Another fungal infection that affects adults is tinea unguium (*ungium* – Latin for nail). This fungal infection occurs in nails, with toenail infection being much more common than fingernails. It rarely occurs in children.

Tinea pedis, also known as athlete's foot, affects both the skin surface of the foot and between the toes. Both of these fungal infections can be acquired from contact, such as walking on warm, wet floors where the fungus exists. Athlete's foot and nail fungus can also develop from wearing shoes or boots that cause feet to become warm and sweaty.

When nails are affected by fungus, they become thickened and opaque, and appear yellowish-brown, cracked, dry, and flaky. In athlete's foot, the skin of the feet is usually dry and scaly, but when it develops between the toes, the skin appears moist and scaly. Risk factors such as diabetes, older age, a lowered

immune system, poor circulation, and shoes that fit improperly can also contribute to developing both nail fungus and athlete's foot infection.

How are fungal infections diagnosed at the lab?

Tissue from a biopsy is sent to a pathology lab. There the

tissue is prepared on glass slides and reviewed by a pathologist, a clinician who has specialized in diagnosing diseases under the microscope. At Inform Diagnostics, all of the pathologists have further specialized in their specific field of practice, such as dermatopathology for dermatology conditions.

The pathologist looks for abnormal cellular changes at a microscopic level. He or she interprets the findings under the microscope in the context of the clinical information provided by the healthcare provider. Some cases require an additional special stain, such as a fungal stain.

At Inform Diagnostics, difficult and unusual cases are reviewed together by our specialists at large multi-headed microscopes to render the most accurate and definitive diagnosis possible.

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The pathologist creates a pathology report with all the important findings, including critical information to help guide treatment and assess prognosis, which is sent back to the healthcare provider.

Current tinea treatments

Treatment depends on the location and extent of the infection, which can be confirmed by a biopsy sent to a laboratory for examination and/or a fungal culture. Therapy includes oral medications and/or application of topical antifungal cream.

Compared to tinea corporis, tinea unguium is more difficult to treat and requires taking an oral antifungal medicine for six to twelve weeks. Improvement will show as the new healthy nail grows in during this time. Fungal infections can be hard to treat, and they can come back, so it is essential to keep the areas affected clean and as dry as possible to get the best results.

In some cases, people experience side effects from their oral therapy including rashes or liver problems, and certain medications can interact with antifungal drugs. Patients should tell their healthcare provider about all other medications they are taking, including herbals and supplements. Always report any side effects or problems that occur when taking medications.

This material is intended for patient education and information only. It does not constitute advice, nor should it be taken to suggest or replace professional medical care from your healthcare provider. Your treatment options may vary, depending upon medical history and current condition. Only your healthcare provider and you can determine your best option.

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Inform Diagnostics continuously improves diagnostic precision through a unique consensus approach, rigorous quality assurance, comprehensive expertise, ongoing education and research, and close relationships with clinician clients.



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