

Fungal Infections of the Nails (Onychomycosis, Tinea Unguium)

Infections of the nails with fungi are uncommon in children, but they do occur. These infections are caused by dermatophytes—the same fungi that cause ringworm and athlete’s foot. The nails slowly become discolored, thickened, and brittle. Oral antifungal drugs are effective, but may require treatment for up to 3 months.

What are fungal infections of the nails?

Although not as often as adults, children and teens may get fungal infections of the nails. These infections are usually caused by dermatophytes—the same fungi that cause ringworm and athlete’s foot. In fact, when a nail does become infected, it is usually a toenail and occurs with athlete’s foot. These infections are also called “onychomycosis” or “tinea unguium.”

Candida, a type of yeast, can also cause nail infection, usually on the hand. These infections are less common.

What do they look like?

- The infection usually starts at the end of the nail and develops very slowly.
- The nail becomes whitish in color; over time, it becomes yellow or brown.
- The nail becomes thicker, with a collection of dead skin underneath.
- If the infection is present for a long time, the nail can become loose.

Nail infections caused by *Candida* are different. They usually occur on the hand, and there is inflammation (redness, swelling) of the skin around the nail.

Bacterial infections only involve the skin around the nail. These infections produce redness, swelling, and pain (like an ingrown toenail).

What increases your child’s risk of fungal infections of the nails?

- Because the fungi that cause nail infections like warm, moist areas, they are most likely to spread in hot, humid

weather or when your child wears heavy shoes during long periods of exercise or activity.

- Athlete’s foot (fungal infection of the foot) may be present as well.

How are fungal infections of the nails diagnosed?

Dermatophyte infections of the nails can look like a number of different conditions—for example, psoriasis or trauma. Because treatment involves taking oral antifungal drugs, the doctor may perform some tests to be sure of the diagnosis.

The doctor may obtain a sample of the nail and examine it under the microscope to see if fungus is present. The doctor may also send a sample for fungal culture. It may take a week or longer to get the culture results.

How are fungal infections of the nails treated?

- Several different antifungal medications can be used to treat dermatophyte infections of the nails. Some commonly used drugs are terbinafine (Lamisil) and itraconazole (Sporonox). Your child will have to continue taking these drugs for a fairly long time—up to 3 months, depending on the drug and whether the infection is in the toenail or on the fingernail.
- The antifungal medications used to treat nail infections can cause side effects, especially liver problems. Close follow-up is needed, including tests of liver function.
- After treatment, there is a significant risk that the infection will return. Even if treatment is successful, it takes several months for the nail to grow back completely.

When should I call your office?

Call our office if your child has a fungal nail infection that does not improve with treatment or comes back after treatment.

During treatment with oral antifungal medications, call our office if your child develops abdominal pain, especially on the right side.