



FAMILY FOOT AND ANKLE CLINIC

SPECIALISTS AND SURGEONS

At Family Foot & Ankle Clinic, we are committed to providing you with the highest quality of care and ensuring you have all the information you need to make informed decisions about your health.

If you have any questions or concerns, please don't hesitate to reach out to us. You can contact our office directly at 763-421-7300. Additionally, you can visit our website at <https://familyfootmn.com/> for more resources and information about our services.

Thank you for choosing us for your healthcare needs!

Common Nail Concerns & What You Should Know

Nail Fungus

A fungus is an organism that lives in warm moist areas. Fungus of the toenails is a common problem that can affect people of all ages, although it most commonly affects older individuals.

Toenail fungus often begins as an infection in the skin called tinea pedis (also known as [athlete's foot](#)). The fungus often starts under the nail fold at the end of the nail. Over time, it grows underneath the nail and causes changes to the nail's appearance, such as a yellow or brownish discoloration. It can also cause thickening and deformity of the toenail.

Dermatophytes (T. Rubrum, T. mentagrophytes) are the most common class of fungus to infect the nails, however, other infecting organisms do exist. Therefore, your Foot & Ankle Specialist may send a specimen of your nail to the lab for evaluation and identification of the specific organism (especially if oral anti-fungal therapy is being considered). In the absence of specific organism identification, anti-fungal therapy should target dermatophytes, which cause 60-70% of all nail fungus. BAKO PATHOLOGY SERVICES identifies **fungicidal (i.e., fungus-killing) agents (tolnaftate, terbinafine)** as the best medications to treat dermatophyte infections of the skin, however, sometimes medication has a harder time penetrating nails (especially when they are very thick). **Therefore, permeability may be enhanced using topical urea > 40% (up to 20-fold), potentially increasing anti-fungal efficacy.** Other antifungal agents may require fungal speciation (identification) to ensure proper utilization.

When systemic (oral) therapy is preferred, **oral terbinafine/lamisil** has been shown to have a mycologic cure rate of 72-79%.

Yellow Toenails

The most common cause of yellow discoloration in the toenails is a fungal infection. The fungus often develops underneath the nail, resulting in it becoming thick, raised and yellow in color. Other potential causes for yellow discoloration of the nail include diabetes mellitus and lymphedema (chronic leg swelling). Yellow staining of the nails can also occur in individuals who use nail polish. A stained nail may take several months to grow out (complete regrowth of normal nail takes between 9-12 months, longer if poor blood flow or other confounding comorbidities exist).

Thick Toenails

Toenails will often become thick as an individual grows older. Thickening may also occur as a result of trauma to the toenail, such as when it repeatedly hits the end of a shoe that is too small. Sometimes when something is dropped on the toenail, the nail will fall off. When a new toenail grows back, it will often be thicker than it was previously.

Thick toenails can also be seen in individuals with nail fungus (onychomycosis), psoriasis, and/or hypothyroidism. Those who have problems with the thickness of their toenails should consult a foot and ankle surgeon for proper diagnosis and treatment.

White Toenails

White toenails can develop for several reasons.

Trauma, such as when an object is dropped on a toenail, often causes bleeding under the nail because of broken blood vessels. This would cause a black toenail. If the trauma does not cause broken blood vessels, a white spot may appear under the nail. The spot will slowly grow out with the normal growth of the toenail.

Sometimes white lines appear within the toenail. These may be caused by recurring trauma, such as when a runner wears shoes that are too small and the toe hits the end of the shoe. White lines may also occur due to a medical illness or trauma that has occurred elsewhere in the body, causing protein to be deposited within the nail bed.

A fungal infection that affects the outermost layer of the toenail may cause a bright white discoloration of the toenail.

A white area close to the nail fold (the lunula) varies in size from one person to another. This is a normal aspect of the nail.

It is recommended that you see a foot and ankle surgeon for the diagnosis and possible treatment of white toenails.

Black Toenails

A black, purple, or brownish discoloration under or involving a toenail is frequently due to trauma to the toenail, such as when something is dropped on the toe. The color results from a blood clot or bleeding under the nail and may involve the entire nail or just a small portion of it. This can be very painful when the entire nail is involved and may need medical attention to relieve the pressure caused by bleeding under the toenail.

When the second or third toenails are involved, it is commonly referred to as "runner's toe." This can be the result of the nail being slightly too long and the shoe being either too big or too tight. If the shoe is too big, when running down hill, the foot slips and the nail can get caught where the toe cap meets the toebox. If the shoes are too tight, the nail can get pinched and jammed, resulting in bleeding between the nail plate and nail bed.

Although it is very rare, a more serious cause of black toenails is malignant melanoma. Since early diagnosis and treatment of melanoma improves the chances for a good outcome, it is important that all black toenails be evaluated by a qualified foot and ankle surgeon to rule out this cause.

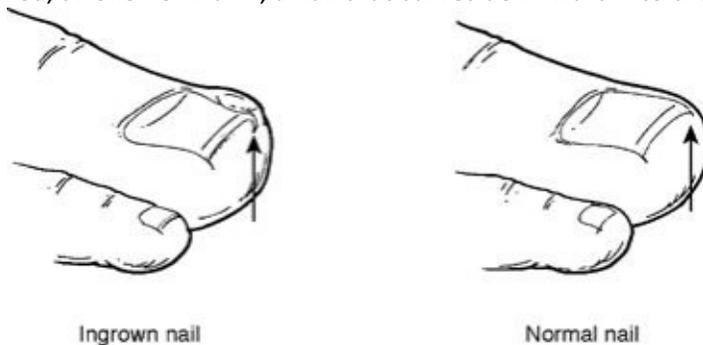
Other, less common, causes of black toenails include fungal infections, chronic ingrown nails, or health problems affecting the rest of the body.

Ingrown Toenail

What Is an Ingrown Toenail?

When a toenail is ingrown, it is curved and grows into the skin, usually at the nail borders (the sides of the nail). This digging in of the nail irritates the skin, often creating pain, redness, swelling and warmth in the toe.

If an ingrown nail causes a break in the skin, bacteria may enter and cause an infection in the area, which is often marked by drainage and a foul odor. However, even if the toe is not painful, red, swollen or warm, a nail that curves downward into the skin can progress to an infection.



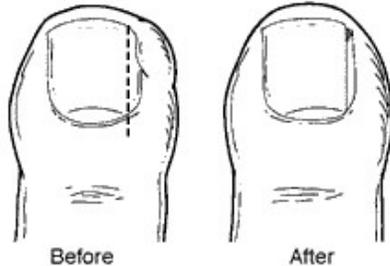
Causes

Causes of ingrown toenails include:

- **Heredity.** In many people, the tendency for ingrown toenails is inherited.
- **Trauma.** Sometimes an ingrown toenail is the result of trauma, such as stubbing your toe, having an object fall on your toe or engaging in activities that involve repeated pressure on the toes, such as kicking or running.
- **Improper trimming.** The most common cause of ingrown toenails is cutting your nails too short. This encourages the skin next to the nail to fold over the nail.
- **Improperly sized footwear.** Ingrown toenails can result from wearing socks and shoes that are tight or short.
- **Nail conditions.** Ingrown toenails can be caused by nail problems, such as fungal infections or losing a nail due to trauma.
-

Treatment

Sometimes initial treatment for ingrown toenails can be safely performed at home. However, home treatment is strongly discouraged if an infection is suspected or for those who have medical conditions that put feet at high risk, such as diabetes, nerve damage in the foot or poor circulation.



Home Care

If you do not have an infection or any of the above medical conditions, you can soak your foot in room-temperature water (adding Epsom salt may be recommended by your doctor) and gently massage the side of the nail fold to help reduce the inflammation.

Avoid attempting “bathroom surgery.” Repeated cutting of the nail can cause the condition to worsen over time. If your symptoms fail to improve, it is time to see a foot and ankle surgeon.

Physician Care

After examining the toe, the foot and ankle surgeon will select the treatment best suited for you. If an infection is present, an oral antibiotic may be prescribed.

Sometimes a minor surgical procedure, often performed in the office, will ease the pain and remove the offending nail. After applying a local anesthetic, the doctor removes part of the nail’s side border. Some nails may become ingrown again, requiring removal of the nail root. Following the nail procedure, a light bandage will be applied. Most people experience very little pain after surgery and may resume normal activity the next day. If your surgeon has prescribed an oral antibiotic, be sure to take all the medication, even if your symptoms have improved.

Preventing Ingrown Toenails

Many cases of ingrown toenails may be prevented by:

- **Proper trimming.** Cut toenails in a fairly straight line, and do not cut them too short. You should be able to get your fingernail under the sides and end of the nail.
- **Well-fitting shoes and socks.** Do not wear shoes that are short or tight in the toe area. Avoid shoes that are loose because they too cause pressure on the toes, especially when running or walking briskly.

What You Should Know About Home Treatment

- **Do not cut a notch in the nail.** Contrary to what some people believe, this does not reduce the tendency for the nail to curve downward.
- **Do not repeatedly trim nail borders.** Repeated trimming does not change the way the nail grows and can make the condition worse.
- **Do not place cotton under the nail.** Not only does this not relieve the pain, it provides a place for harmful bacteria to grow, resulting in infection.

- **Over-the-counter medications are ineffective.** Topical medications may mask the pain, but they do not correct the underlying problem.

www.foothealthfacts.org