Fungal Nails (Onychomycosis)

Fungal infection of the nail, or onychomycosis, is often ignored because the infection can be present for years without causing any pain. The disease is characterized by a progressive change in a toenail's quality and color, which is often ugly and embarrassing.

In reality, the condition is an infection underneath the surface of the nail caused by fungi. When the tiny organisms take hold, the nail often becomes darker in color and foul smelling. Debris may collect beneath the nail plate, white marks frequently appear on the nail plate, and the infection is capable of spreading to other toenails, the skin, or even the fingernails. If ignored, the infection can spread and possibly impair one's ability to work or even walk. This happens because the resulting thicker nails are difficult to trim and make walking painful when wearing shoes. Onychomycosis can also be accompanied by a secondary bacterial or yeast infection in or about the nail plate.

Because it is difficult to avoid contact with microscopic organisms like fungi, the toenails are especially vulnerable around damp areas where people are likely to be walking barefoot, such as swimming pools, locker rooms, and showers, for example. Injury to the nail bed, such as repeated contact with a shoe, may make it more susceptible to all types of infection, including fungal infection. Those who suffer from chronic diseases, such as diabetes, circulatory problems, or immune-deficiency conditions, are especially prone to fungal nails. Other contributing factors may be a history of athlete's foot and excessive sweating. It is very important to address the excessive sweating with application of safe topical medications provided in our office and also to treat your shoes daily with antifungal spray we provide to kill the fungus that lives in your shoes and continues to cross contaminate your toe nails.

Prevention

- Proper hygiene and regular inspection of the feet and toes are the first lines of defense against fungal nails.
- Clean and dry feet resist disease.
- Washing the feet and toes with soap and water, remembering to dry thoroughly, even between the toes, is the best way to prevent an infection.
- Shower shoes should be worn when possible in public areas.
- Shoes, socks, or hosiery should be changed more than once daily.
- Toenails should be clipped straight across so that the nail does not extend beyond the tip of the toe.
- Wear shoes that fit well and are made of materials that breathe.
- Avoid wearing excessively tight hosiery, which promote moisture.
- Socks made of synthetic fiber tend to "wick" away moisture faster than cotton or wool socks.
- Disinfect instruments used to cut nails.
- Disinfect home pedicure tools.
- Don't apply polish to nails suspected of infection—those that are red, discolored, or swollen, for example.

Treatment of Fungal Nails

The podiatric physicians in Central Kansas Podiatry Associates have been trained specifically and extensively in the diagnosis and treatment of all manner of foot conditions. This training encompasses all of the intricately related systems and structures of the foot and lower leg including neurological, circulatory, skin, and the musculoskeletal system, which includes bones, joints, ligaments, tendons, muscles, and nerves.

Toenail fungus cures can include both oral and topical medication treatments. The gold standard for treating onychomycosis in an otherwise healthy individual is the oral therapy. The most widely prescribed medication

today is <u>Lamisil tablets</u> (Novartis), although there are certainly other oral antifungals that can be used. The newer generation of oral antifungals are very safe medications if properly used. Lamisil tablets has adverse response rate of less than 3 percent. Typically, the dosing for Lamisil is one tablet per day for three months.

Your doctor should take a sampling of the <u>nail</u> and have it lab tested to confirm that it is true nail fungus. Visual inspection is not the proper way to make a diagnosis. Many times a thickened nail is nothing more than keratinization of the underlying nail bed, which is a thickening of the skin underneath usually from repeated trauma. This can eventually lead to nail fungus because the increased thickened skin is a good focal point for fungus to enter. Once the diagnosis is confirmed as nail fungus we will order blood tests to test the liver during the course of oral therapy, one before beginning the medication and the second after two months, to make be sure there are no adverse effects.

In addition to oral Lamisil we will also have you use topical antifungal medications to treat the infection from the outside in as well as the inside out. We also have a very effective regimen of topical treatments which are less effective than the Lamisil but does help to reduce the fungal infection of the nails and help prevent this aggressive condition from getting worse. Trying to "force" medication underneath the nail is rarely effective.

Almost everyone with fungal infection of the nails has a problem with excessive sweating of the feet even though this may not be apparent. Treatment of excessive sweating is necessary in order to have the best possible result. Spraying Mycomist in your shoes will help kill the fungus in them. Treating your feet with Onox in the evening and Bromi Lotion in the morning will help control the sweating of your feet. It is very important that during and after resolution of your fungal nails that the excessive sweating be treated continually or there is a high likely hood of reoccurrence. In addition you will apply a topical antifungal, Formula 3, to your nails three times a weeks to prevent reoccurrence which is prevalent with this approach.

The best way to use topical medication is to see a foot specialist who will thin down and cut away as much of the diseased nail as possible (a painless procedure), so that the Nonyx will penetrate to the live fungus more readily. This can become a tedious process as the medication generally has to be applied twice a day by the patient, (being lazy about it defeats the whole purpose) and then the nail has to be maintained or kept thin on a regular basis. Depending on the degree of fungus this process can take upwards of a year for new healthy nail to grow out. Adding a Biotin supplement Appearex will help improve the look of your nail in conjuncture with the Nonyx. I have seen some very gratifying results with the combination of oral and topical medication.

However, sometimes there can be unsuccessful results using either topical or oral medication but it is important to follow all of the directions for the best results possible.

Lastly, women who wear toenail polish on a regular basis are more prone to nail fungus, generally the superficial type of nail fungus. When the polish is removed the nail will appears yellowish with pockets of white specks. If left alone this will usually invade the nail plate and become the deep type of onychomycosis (fungus). We now offer colored antifungal toenail polish available to treat fungal nails. Please feel free to ask the doctors or anyone on our TEAM questions about this condition. Thank you!



