

### What is it?

Toenails can undergo many physical changes. These changes can include: thickening, irregular texture, odor, yellow discoloration and brittleness. It is often due to an infection of the skin beneath. This infection is caused by a family of fungal organisms known as dermatophytes. These are the same organisms that cause athletes' foot.

## Bellevue Podiatric Physicians

### How did I get it?

Onychomycosis is very common. The organisms that cause it are ubiquitous (present everywhere). Of patients over 65 years of age, about 30% have some toenail involvement. It is more common as we age and with trauma to the foot. This includes *microtrauma* like hiking downhill with boots that are too small. It also tends to run in families.

# Onychomycosis

(Fungally infected nails)

### Manifestations:

**Pain** associated with fungal nails is either due to an ingrown nail deformity which secondarily comes from the nail thickening or from the shear increase in bulk of the nail from the fungus.

**Chronic athletes' foot** is also commonly seen in these feet since the fungus has a nice, long term hideout under the nail. Athletes' foot would include a red rash, fissuring, vesicles or blisters and an itchy scaling.

**Cosmetics** Fungal changes to the nail will most definitely alter the look of the nail. It can be white and chalky, or very thickened, yellow and brittle, with and irregular texture. It may become very thick as well.

## Treatment

**Debridement** Many fungal nails are simply ground down and filed smooth on a regular basis with special tools at your podiatrist's office. This is sometimes, but not always, covered by your insurance depending on your circulation and health status.

**Topical medication** As of this date, there are no good topical medications for the eradication of nail fungus. Penlac is the only FDA approved medication for this and will only work in a very select group on infections, ones that are very superficial in nature.

**Nail procedures** There are permanent and temporary nail removal procedures for the treatment of nail fungus. The permanent removal is the best choice to rid yourself of the fungus, but then you are left without the nail (most patients tolerate this very well). The temporary removal allows for application of a topical antifungal agent right on the nail bed (skin below the nail) in the months after nail removal. This works about 50% of the time and the nail regrowth takes about 6-9 months.

**Oral medication** Lamisil and Sporonox are two common antifungal agents used in pill form to treat nail fungus. The expense is \$500-\$800. It is taken for about 3 months. The efficacy of this treatment is almost 80%. The side effects are minimal, in fact the blood testing requirement has recently been downgraded to one test before initiation of treatment. Taste loss ( lasting about 3 months ) is the most common side effect we see. Recurrence of the fungus is common after months to years which is why we counsel you on better shoe and sock hygiene.