

Onychomycosis (Toenail Fungus) Laser Treatment with discussion of alternatives

Onychomycosis is a fungal infection of the toenails. It is common and generally considered difficult to treat. While there are myriad treatment options, there is not one option that offers 100% cure. It is often the combination of options that achieves the optimum results.

The GentleMax Pro laser system (Nd:YAG 1064 nm) is used to treat toenail fungus. A controlled amount of heat is produced by the laser light which kills the fungus in the nail plate. The device has been cleared by the FDA, has no downtime or post-treatment care, has minimal discomfort, and does not use medications involving systemic risk. This treatment is effective with a reported cure rates of up to 60% with multiple treatments. Most patients should expect to need at least 4 treatments to achieve this cure depending on their response.

The risk of recurrence is similar to the oral medication described below due to incomplete treatment or reinfection. We estimate the recurrence rate to be in the 15-20% range.

Alternatives to Laser Treatment:

- 1) Oral Medications.** Itraconazole (Sporonox), terbinafine (Lamisil) and fluconazole (Diflucan) have been used to treat onychomycosis. They are effective in approximately 55-70% of cases. However, some of these medications may interact with other medications and it might be necessary to monitor the liver, kidney and blood counts over the course of treatment which may last for 3-12 months. Insurance does typically cover these medications keeping costs around \$10 to \$25 per month.
- 2) Prescription Topical Treatments.** Effective products include efinaconazole (Jublia) and tavaborole (Kerydin). They require daily application and may take as long as 12 months to see notable improvements. The average cure rate is around 35%. Depending on your insurance coverage, the out-of-pocket cost may range from \$25 to over \$750 per bottle; a bottle may last ~ 3 months. We recommend using a specialty pharmacy for the best out-of-pocket pricing.
- 3) Over the Counter Products.** There are many products that are widely available. These options have not been shown to be particularly effective, so we do not recommend these products.
- 4) No Treatment.** Unfortunately, untreated fungus will likely not go away on its own. It can even spread to other nails, feet, and your skin. Untreated nails may become thickened, brittle and start to crack, causing difficulty with ordinary nail grooming and health.

Before your Laser Treatment

1. Remove any nail products.
2. File down the thickness of the nail plate with an emery board. The thinner the nail, the more effective the treatment.
3. Bring clean shoes and socks to the day of the treatment.

Toenail Fungus Prevention

- Wear footwear when using pools, gym showers, and locker rooms.
- Use nail salons that properly sterilize the nail equipment; better yet, bring your own equipment.
- Discard old shoes or disinfect with topical fungal powders.
- Choose shoes that are made of breathable materials.
- Wash and moisturize your nails daily.

Laser Cost: \$500 per foot per treatment.

