

Successful Treatment of Resistant Onychomycosis

Jasna Blaha, MD

Introduction:

Tinea unguium is a fungal infection of the nail that causes discoloration, thickening, and separation from the nail bed. It is more common on the toenails, but fingernails may also be affected. Males are affected more often than females and it occurs in about 10 percent of the adult population. The incidence is higher with older people. A diagnosis is generally suspected based on the appearance and confirmed by laboratory testing. Nail fungus can be painful and cause permanent damage to nails. Many different treatments are available; systemic antifungals offer the best efficacy but can cause liver problems. Recurrence after effective treatment is common (10–50%).

Laser	SP Dynamis
Wavelength	1064 nm
Handpiece	R33
Fluence	30 J/cm ²
Pulse duration	10 ms
Mode	VERSA
Frequency	1 Hz
Passes	3 passes
Spot size	9 mm
Sessions	6 sessions with 1 month interval, (then 1 session with a 2-month interval until the nail grows out completely)



Dr. Blaha has been working with Fotona lasers for more than 20 years. As a longtime Fotona reference physician, she has had the opportunity to discover the many advantages of using laser technology for medical purposes. With her extensive knowledge and experience working with lasers, she has helped to educate numerous doctors in Slovenia and around the world. She is a member of the Academy of Laser Medicine and frequently attends conferences, seminars and workshops related to aesthetic medicine. Her work is backed by in-depth knowledge and years of experience in the field of permanent hair removal, disruptive vascular changes, skin rejuvenation, acne treatment, and fungal diseases of nails and warts.

CLINICAL CASE:

A patient in his 50's came to our clinic because he heard we treat onychomycosis with laser. He tried many different topical treatments before, but none worked. He wanted to explore all other options before starting systemic antifungals. No special pretreatment procedures were done. All 10 toenails were treated with laser because all showed at least some degree of changes that could be contributed to fungal infection. During each session three passes were performed while cold air cooling was used (Zimmer level 6). The patient was instructed to avoid areas like spas, swimming pools, etc. and also advised to do the following: all textile footwear (socks, slippers) are to be washed at more than 60°C and all shoes must be placed 48 hours in the freezer. Nails should be dry and clean at all times. After six sessions, improvement (clear nail growth) was seen proximally, but it took another year for the healthy nail to grow out completely.



Published by the Laser and Health Academy. All rights reserved. © 2021

Disclaimer: The intent of this Laser and Health Academy publication is to facilitate an exchange of information on the views, research results, and clinical experiences within the medical laser community. The contents of this publication are the sole responsibility of the authors and may not in any circumstances be regarded as official product information by the medical equipment manufacturers. When in doubt please check with the manufacturers whether a specific product or application has been approved or cleared to be marketed and sold in your country.

