Dr. Sharifah Al-Awadhi received her Bachelor of Medical Sciences Degree from Kuwait University in 1999 and a Degree of Bachelor of medicine and surgery from the same university in 2002. In addition to completing residencies and becoming certified by the Arab (ABD) and Kuwaiti (KBD) Boards of Dermatology and Venereology, she also completed a Medical Council of Canada Evaluating Examination in 2003 and a Fellowship in cosmetic and laser at Mount Sinai Hospital in New York in 2015.



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Nd:YAG Laser Treatment for Onychomycosis

Dr. Sharifah Alawadhi

Parameters:

Laser source:	Nd:YAG, 1064 nm
Pulse duration:	35 ms
Fluence:	40 J/cm ²
Handpiece:	R33
Spot size:	4 mm

Treatment procedure:

A female patient in her early forties came to the clinic complaining of nail changes over the past 2 years. She was diagnosed as having onychomycosis affecting her toe nails, although she didn't have diabetes. It started gradually and spread to all 10 toenails. A nail fungus laboratory test (KOH) was done, and it was suggestive of onychomycosis. So, she received multiple oral and topical antifungal therapies with mild improvement. She presented to our clinic with brittle and easily breakable toenails with yellowish discoloration of the big toenails.

The patient is not on any treatment now and we treated her in our clinic with Nd:YAG laser.

First the nails were cleaned and Nd:YAG laser was administered in a circular pattern, starting along the sides and moving with a slight overlap to cover the entire nail. A total of 3 passes were delivered for each nail during the same session. No anesthesia or cooling were used. Often a patient complains of mild pain due to heat in the final pass, which is tolerable. The total therapy consisted of 4 sessions with one-week intervals. The patient was asked to not use any topical or oral treatment after or between the sessions. Follow up after 4 months from the treatment date showed complete clearance of the toenails with an excellent normal nail growth after 6 months. Nd:YAG laser is effective, quick and the least invasive treatment for nail fungal infections.



Before onychomycosis treatment



After 4 months



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