

Cosmasure, India

**Keywords:** Q-Switched Nd: YAG, Resistant Onychomycosis, Lasers In Onychomycosis, Itraconazole Resistance.

**ABSTRACT**

**Background:** Onychomycosis (ONM), hitherto an easily manageable problem, more commonly seen in elderly patients has unfortunately transformed into an extremely difficult-to-treat nail disorder, especially due to the widespread azole resistance. Not only has the azole resistance become a reason of treatment failure with itraconazole or ITRA (the usual drug of choice), the azole-induced cross-resistance to oral terbinafine and topical amorolfine has rendered ONM caused by dermatophytes, yeasts as well as molds to multi-drug-resistant (MDR) ONM, refractory to all forms of pharmacological interventions.

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# Immunology: Current Research

Extended Abstract

Open Access

Physical therapies, especially laser treatments, have been anecdotally reported to provide gratifying results in ONM. However, their success in eradication of proven MDR onychomycosis is lacking. In my lecture, I shall be discussing the mechanism of action, methodology, success rates, and mild precautions required while treating MDR ONM with lasers, especially Q-switched Nd:YAG laser. I would crystallize the concepts on exploiting the latter's property of selective photothermolysis against the fungal chromophore of xanthomagnin (532 nm) or melanin (1064 nm), and thermal disruption of biofilms to result in a cost-effective, species-blind high-efficacy, and geriatric-safe approach to eradication of azole-resistant and MDR onychomycosis.

For colleagues who don't have access to this otherwise easily available and affordable device, I shall dwell upon our team's novel innovation

of successful repurposing of the Black Peel, a cosmetic peel for acne and pigmentation consisting black acetic acid, salicylic acid, tetrahydrojasmonic acid, bio sulphur, and potassium iodide for successful treatment of ONM (532 nm) or m283eg65 (co)12 (n)dnac602 (n/S)