**Long Pulsed Nd:YAG 1064-Nm Laser in Treatment of Onychomycosis**

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Abstract

Onychomycosis is a common nail disease, especially in older patients. Various treatment options are currently available for onychomycosis; however, their limitations include high failure rates, time-consuming nature, high cost, and high risk of drug interactions. Objective: To evaluate the efficacy of onychomycosis treatment with a long-pulsed 1064-nm Nd:YAG laser. Patients and Methods: ten patients were assessed. The study involved treatment with a long-pulsed 1064-nm Nd:YAG laser in two sessions at 4-week intervals. Fungal culture at two media sabourauds dextrose agar with cycloheximide and without cycloheximide and microscopic examination were performed at the start and then one-month after the second session. Results: After two sessions, the mycological test results were negative in eigh 80%. The result showed that the mean improvement percentage was 60.50 %. Side effects were mild and limited to mild pain and delayed nail growth after the laser procedure. Conclusions: Long-pulsed 1064-nm Nd:YAG laser therapy is safe and effective for treating onychomycosis.

Keywords: Onychomycosis, Long-pulsed laser, Fungal culture