



Low Level Laser Therapy & Candida albicans clinical research

Effect of low-level laser therapy on Candida albicans growth in patients with denture stomatitis.

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OBJECTIVE: The purpose of our report is to present the effect of low-level laser therapy on *Candida albicans* growth and palatal inflammation in two patients with denture stomatitis. **BACKGROUND DATA:** The most common oral mucosal disorder in denture wearers is denture stomatitis, a condition that is usually associated with the presence of the yeast *Candida albicans*. Different treatment methods have been suggested to treat this symptom, none of which is proven to be absolutely effective. **METHODS:** Two denture-wearing patients, both with palatal inflammation diagnosed as Newton type II denture stomatitis were treated with low-power semiconductor diode laser (BTL-2000, Prague, Czech Republic) at different wavelengths (685 and 830 nm) for 5 d consecutively. In both patients, palatal mucosa and acrylic denture base were irradiated in noncontact mode (probe distance of 0.5 cm from irradiated area) with different exposure times-5 min (830 nm, 3.0 J/cm², 60 mW) and 10 min (685 nm, 3.0 J/cm², 30 mW). The effect of laser light on fungal growth in vivo was evaluated after the final treatment using the swab method and semiquantitative estimation of *Candida albicans* colonies growth on agar plates. The severity of inflammation was evaluated using clinical criteria. **RESULTS:** After lowlevel laser treatment, the reduction of yeast colonies on the agar plates was observed and palatal inflammation was diminished. **CONCLUSION:** LLLT is effective in the treatment of denture stomatitis. Further placebo controlled studies are in progress.

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