

## Burn Scars

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### **Low Level Laser Therapy--a conservative approach to the burn scar?**

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Burn scars are known to be difficult to treat because of their tendency to worsen with hypertrophy and contracture. Various experimental and clinical efforts have been made to alleviate their effects but the problem has not been solved. Since patients keep asking for Low Level Laser Therapy (LLLT) and believe in its effectiveness on burn scars, and since former studies show contradictory results of the influence of LLLT on wound healing, this prospective study was designed to objectify the effects of LLLT on burn scars. Nineteen patients with 19 burn scars were treated with a 400 mW 670 nm Softlaser twice a week over 8 weeks. In each patient a control area was defined, that was not irradiated. Parameters assessed were the Vancouver Scar Scale (VSS) for macroscopic evaluation and the Visual Analogue Scale (VAS) for pruritus and pain. Photographical and clinical assessments were recorded in all the patients. Seventeen out of 19 scars exhibited an improvement after treatment. The average rating on the VSS decreased from 7.10+/-2.13 to 4.68+/-2.05 points in the treated areas, whereas the VSS in the control areas decreased from 6.10+/-2.86 to 5.88+/-2.72. A correlation between scar duration and improvement through LLLT could be found. No negative effects of LLLT were reported. The present study shows that the 400 mW 670 nm softlaser has a positive, yet sometimes limited effect on burn scars concerning macroscopic appearance, pruritus, and pain.