



DERMATOLOGICAL SURGERY

## LASER ASSISTED LIPOSUCTION: A 6-YEAR EXPERIENCE WITH 1223 DIFFERENT PATIENTS

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**Introduction:** Laser liposuction is a modern minimally invasive technique to remove localized fat deposits. Nd:Yag Laser is used to liquefy fat, before it is removed by the classic aspiration cannula. In addition, laser thermal energy leads to collagenesis and skin tightening. We evaluated the efficacy and safety of 1064nm Nd:YAG Laser in the treatment of local fat.

**Materials and Methods:** 1223 different patients, 711 women and 512 men, were treated in our clinic during the years 2011-2017. They all underwent a laser assisted lipolysis under tumescent anesthesia. The liposuction was performed with a subcutaneous 1064nm Nd:YAG Laser, power adjusted at 6 Watt and Frequency at 40Hz. The laser energy was delivered via a 300µm optical fiber. The average energy delivered was 3650 Joules per area. The most common areas treated were abdomen, thighs and waistline. All patients were advised to wear a compression garment for 30 days after the procedure.

**Results:** Evaluation of the results was performed clinical by digital photos and measurements and by Full Body Composition Analyzer. It took place before the operation, one, six and twelve months post treatment. All patients filled in a Dermatology Life Quality Index (DLQI) questionnaire before and one year after the operation. One-month follow-up revealed an average reduction of 2-5 centimeters in the circumference of treated areas. Results after six months showed a significant clinical improvement of local fat and skin appearance in 62% of the patients. Twelve months later the satisfaction rate was over 87% in both men and women. The majority of patients mentioned no significant complications, except for bruises.

**Conclusion:** Nd:YAG Laser assisted liposuction constitutes a safe and effective treatment for resistant local fat, providing comparable results to those of traditional liposuction with the additional advantage of skin tightening.

