

LASER ASSISTED SWEAT GLAND REDUCTION – A HISTOLOGICAL AND CLINICAL STUDY

Afschin Fatemi

S-thetic Clinic, Duesseldorf, Germany

* Not FDA cleared. International use only.

Background: Axillary Hyperhidrosis is still a challenge, when it comes to the treatment options. Liposuction or curettage alone are not efficient, sympathectomy is invasive and comes with compensatory hyperhidrosis, Microwaves are not well controllable. Laser assisted sweat gland reduction can be performed under local anesthesia and is regarded as minimal invasive.

Study: 402 patients were treated by LASR-H with a fat-selective wavelength of 924 nm, in tumescent local anesthesia, using a special technique. Some patients were treated with a waterselective wavelength. Histologies of the aspirate and the tissue, immediately and some months after the treatment were taken and analyzed. In a retrospective, qualitative study, the 402 patients were screened up to 24 months retrospectively about success of the treatment. In a prospective, quantitative study, a group of 20 patients had weight measurements before and 18 months after surgery.

Results: Out of 402 patients, less than 8% still had some residual sweating after the first surgery. After a touch up procedure, this number went down to 1%. The studies also showed, that in 90% of the patients the reduction of the amount of axillary sweat was >85% and the effect was permanent. Histologies proved the mechanism of action, sweat glands were coagulated and replaced by fibrotic tissue. Complications were temporary.

Conclusion: Laser Assisted Sweat Gland Reduction LASR-H using a fat selective wavelength is efficient and reliable and safe.