

13th Global Dermatologists Congress

July 23- 24, 2018 | Moscow, Russia



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Improving the final results of tattoo removal

Introduction: Tattoo removal with q-switched laser systems, recently with picosecond lasers, has become daily business in laser clinics. The more we do the more we become aware of problems. The mayor problem is to achieve the complete removal with no residual scarring. While patients five years ago asked for the number of sessions needed, now they ask for the risk of scarring and incomplete removal. The aim of this case study is to evaluate a new standard procedure for tattoo removal treatment.

Material and Methods: We treated 20 patients between 10/2013 and 10/2015 with mono coloured black tattoos of different size. The treatment was always performed in the same way:

1. After application of an anaesthetic ointment the tattoo is treated with a q-switched NeoDym YAG laser biggest possible spot and lowest energy that leads to whitening of the colour. In our system this is mainly 8mm spot, 1.6 J initially. The dosage is adjusted each session up to the reaction of the colour.
2. During the treatment and after the treatment the tattoo area is cooled with air cooling.
3. 15-20min after the first treatment a second treatment is performed with slightly higher energy.
4. Directly afterwards the whole tattoo field is treated with an ablative CO2 fractionated laser 120 micrometre spots, 30watts, 40mJ, medium density.
5. After the treatment we apply a bandage with hyaluronic acid ointment what is continued by the patient for one week.
6. Week 2-8 the patient applies a scar ointment.
7. The next treatment is performed after 8 weeks.

Results: During this period, we finished up 18 out of 20 patients. The treatments were tolerated very well. There were no cases of infection, blistering or prolonged healing period. The results were excellent: 16 patients had total clearance of the tattoo without scarring, 2 patients had less than 10% residual colour.

Recent Publications:

8. Prinz BM, Vavricka SR, Graf P, et al. Efficacy of laser treatment of tattoos using lasers emitting wavelenghts of 532 nm, 755 nm and 1064 nm. Brit J Dermatol. 2004; 150(2): 245-251.
9. Schönewolf N. Tätowierungen und wie man sie wieder los wird. Swiss Medical Forum. 2010; 10: 340-343.
10. Anderson RR, Margolis RJ, Watanabe S, et al. Selective photothermolysis of cutaneous pigmentation by Q-switched Nd: YAG laser pulses at 1064, 532, 355 nm. J Invest Dermatol. 1989; 93(1): 28-32
11. Herd RM, Alora MB, Smoller B, et al. A clinical and histologic prospective controlled comparative study of the picosecond titanium: sapphire (795 nm) laser versus the Q-switched alexandrite (752 nm) laser for removing tattoo pigment. J Amer Acad Dermatol. 1999; 40 (4): 603-606
12. Weiss ET, Chapas A, Brightman L, et al. Successful treatment of atrophic postoperative and traumatic scarring with carbon dioxide ablative fractional resurfacing: quantitative volumetric scar improvement. Arch Dermatol. 2010; 146(2): 133-140

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Biography

After completing my residency as a dermatologist and allergologist at the University Hospital Hamburg-Eppendorf, Germany, with internships at Stanford University, Palo Alto and the Mayo Clinic, Rochester, USA, I worked two years in a large group practice in Frankfurt. From 1998 to 2008 I run my own private practice near Frankfurt. After moving to Switzerland, I worked at the University Hospital Zurich for 8 years, where I directed the clinic for Aesthetic Dermatology and Laser Medicine for 3 years. Since April 2014, I dedicated myself exclusively to the work in my own clinic. I am licensed for laser treatments and accredited by the Laser Commission as a training center. Aesthetic and laser medicine have become my main topics in recent years. My clinic offers the full range of state-to-the-art laser devices that are used in dermatology. As President of the Swiss Society for Medical Laser Applications (SGML) I take responsibility for the Swiss Laser Congress.

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