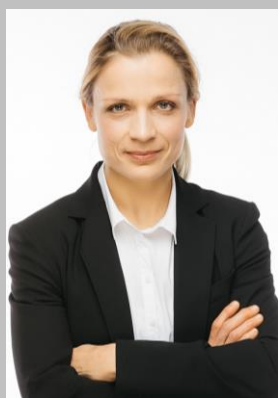


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KTP 532 nm Q-switched Laser for Solar Lentigo

Ursa Florijancic, MD

Parameters:

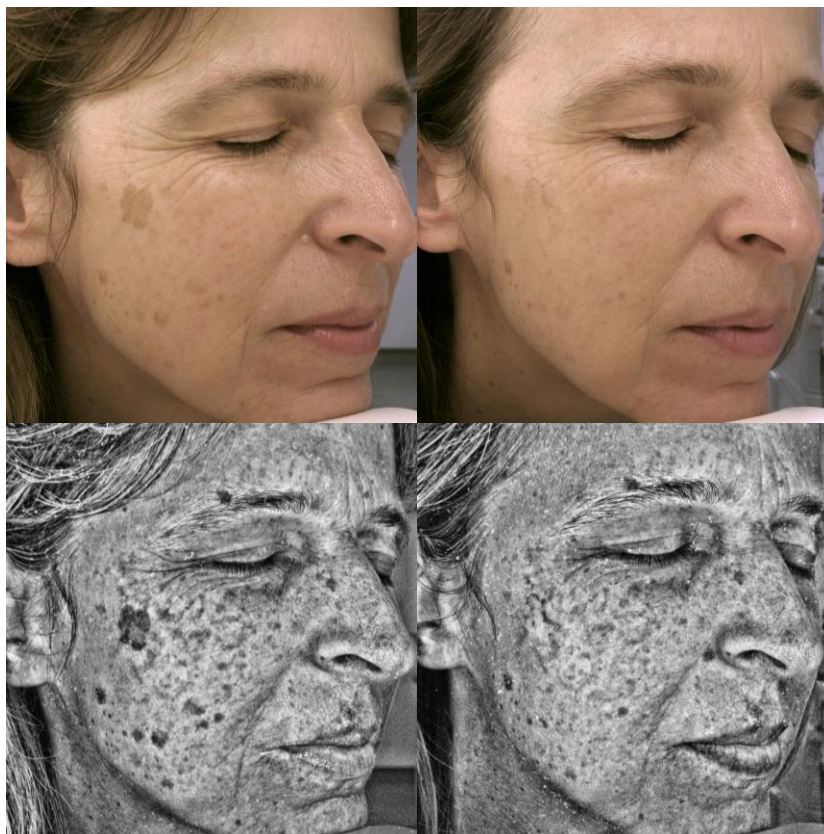
Laser source:	KTP, 532 nm
Pulse duration:	Q-switched
Fluence:	1.5 -1.7 J/cm ²
Frequency:	1 Hz
Handpiece:	R28
Spotsize:	3-4 mm

Treatment procedure:

Solar lentigines typically appear on sun-exposed areas of skin. They are a consequence of chronic UV irradiation of skin, which causes local proliferation of melanocytes and increased accumulation of melanin within keratinocytes.

The KTP 532 nm laser wavelength is highly absorbed in melanin, which is the target chromophore for the removal of solar lentigines and ephelides. It is completely absorbed within very superficial layers of skin. The objective of treatment is to deliver a high enough amount of energy in a nanosecond range of pulse duration to exploit the thermal and photoacoustic effects of laser-tissue interaction and to minimize thermal diffusion and damage to the surrounding tissue.

The treatment was performed with a StarWalker laser (Nd:YAG) in Q-switched KTP mode, with a fluence of 1.5-1.7 J/cm² and 3-4 mm spotsize, performing minimal overlapping in a single pass. The endpoint was immediate delicate whitening and delayed redness. In the following days a thin crusting developed over the treated areas that resolved within 7 days. A remarkable and almost complete clearing of the solar lentigines was observed after just one treatment. We performed another treatment with the same parameters in 46 days, after which a complete clearance of the solar lentigines was achieved.



Before treatment

After 1 treatment



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