



# The Medical Power of Light

## Laser Removal of Pigmented Lesions

A fast, simple and minimally invasive Tx

- Safe and effective procedure
- Minimal recovery times
- Suitable for all skin types
- No scalpel, no sutures
- Controlled, accurate and precise
- Exceptionally well-tolerated by patients

**Fotona**  
choose perfection

before



Courtesy of dr. Kozarev

after

before



Courtesy of Fotona

after

## What is Laser Removal of Pigmented Lesions?

Lasers are a simple, fast, effective and safe tool for removing a wide variety of benign pigmented lesions, such as freckles, age spots, birthmarks, moles, certain vascular lesions, ephelides, melasma, seborrheic and actinic keratoses.

## How does it work?

Laser removal of pigmented lesions works by destroying the pigment in the skin without the need for excision. This process is completed in 3 simple steps:

### Step 1 - LIGHT ABSORPTION:

The laser produces short nanosecond pulses of intense light that pass harmlessly through the top layers of the skin to be selectively absorbed by the melanin pigment in the lesion.

### Step 2 - PIGMENT BREAK-UP:

The laser light is transformed into photoacoustic waves which mechanically break up the melanin pigment into smaller particles.

### Step 3 - PIGMENT REMOVAL:

These particles are then removed by the body's own immune system, as the skin's macro-phages clear the excess pigment from the area.

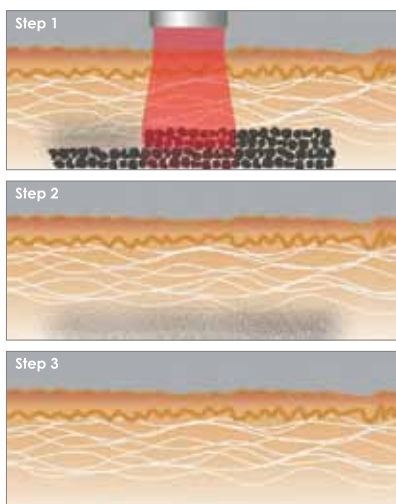


Fig. 1: Complete pigmented lesion removal in 3 steps

## Why is wavelength important?

The laser wavelength is what determines which chromophore will be predominantly targeted by the laser to be selectively removed. Clinical studies show that superficial lesions can be treated most effectively with the KTP 532 nm wavelength, while the Nd:YAG 1064 nm wavelength can be used to target deeper-lying chromophores. Additionally, Q-switched light, available with Fotona's QX MAX laser system, is especially effective due to its high peak powers and selective nature, enabling it to break apart pigments only and not cells. This means that pigment destruction can take place without ablating the skin.

## Why is the QX MAX perfect for Laser Removal of Pigmented Lesions?

It is widely recognized in the medical community that Q-Switched lasers are the ideal tool for effectively removing benign pigmented lesions. Combining 4 laser modalities in an advanced, high-powered solution, Fotona's QX MAX laser system effectively removes all common pigmented lesions.

Fotona's innovative R-HX handpiece produces a completely flat laser beam profile that is hexagonal in shape to allow for more precise and uniform coverage. Homogeneity of the laser beam profile is important in pigment removal treatments and skin whitening. It ensures safety during treatment since laser energy is evenly distributed across the treated area.

The system's OPTOflex articulated arm increases precision and safety. OPTOflex generates absolute uniform beam profiles. Its ergonomic design allows easy and natural hand movement during procedures.

## Advantages for You and Your patients

Laser treatment of pigmented lesions is quick, sutureless, has a rapid healing time and produces excellent results. It is suitable for all ethnic skin types. For example, Asian skin is highly sensitive to heat and often hyper-pigmentation can result from using the wrong laser sources or as a result of poor administration of the laser treatment. The Nd:YAG or KTP Nd:YAG laser sources, on the other hand, have been generating desirable treatment results to all ethnic skin types.

## Getting started with Laser Removal of Pigmented Lesions

Laser removal of pigmented lesions can be performed with Fotona's QX MAX laser system. Fotona additionally offers a Pigmented Lesions Removal Upgrade Kit, giving practitioners the necessary knowledge, accessories and tools to confidently and skillfully remove pigmented lesions. Training in Laser Removal of Pigmented Lesions is provided through Fotona's partnership with the Laser and Health Academy, where participants cover basic laser physics and gain an in-depth understanding of laser-tissue interaction. Live demonstrations give participants an insight in Laser Removal of Pigmented Lesions and other aesthetic procedures that can be performed with the QX MAX laser.

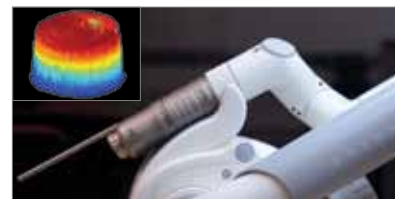


Fig. 2: OPTOflex® projected beam profile

To learn more about **Laser Removal of Pigmented Lesions** and what the QX MAX laser system can do for your practice contact **Fotona** at [info@fotona.com](mailto:info@fotona.com) today.