

Laser in medicine and aesthetic surgery.

Reproduce music or video in a perfect way? **Laser!**

Military technology? **Laser!**

Cut steel? **Laser!**

Identify fingerprints? **Laser!**

Measure the distance with precision? **Laser!**

Medical technology? **Laser for various uses and pathologies.**



The medical laser was born in the 70's and now it is 40 years old. It increases a lot and today it is used in the medical field, and in some of them it is irreplaceable.

Which are the bases for the technology of laser?

LASER, acronym that means Light Amplification by Stimulated Emission of Radiation, is practically a device that gives out light. Obviously a particular type of light and especially very variable because we can have numerous length waves that determine most of the characteristics of the laser: in particular the color on which it acts (the so called chromophore) and the deepness to which the radiation reaches the skin.

While the white light is a cocktail of different wavelength, the laser is a very powerful and selective monofrequency.

So we can have laser characterized by different waves length that vary from about 100 to 10.000 nm. Beside, laser has a really strong and well-directed luminance and intensity of light. All the beams are parallel and uniformly directed.

Lasers are classified in Italy and Europe according to a growing-wide related to the possible danger but also efficiency, from 1 to 4.

Then, the major danger is verified at the eye level. For this reason I make patient use some protective glasses.

Advantages of laser technology

Surely the useful pathologies for laser technology use some characteristics of the laser emission: in particular the extreme precision of the luminous spot, the times of application of the stimulus that can be perfectly determined, and the almost total absence of pain that characterizes this medical therapy.

Beside, some modern equipment uses a cooling of skin (the so called Thermo cool system), which allows the cooling of the treated zone with a noticeable reduction of the collateral effects, in particular due to

inflammation.

Laser Nd-Yag 1064 nm

Laser Neodimio Yag has a wave length of 1064 nm. This wave length allows a better penetration in the cutaneous layers and so to hit the target in the depth.

This is the reason that allows us to treat pathologies as capillaries or to have a good efficiency in the stimulation of derma, and so a good result in the medical resurfacing of face, neck or relaxed districts.

The laser, used in my surgery, has also a very efficient system of cooling which allows to avoid collateral effect as burnings and post-inflammatory hyperpigmentations.

This allows to treat patients who tanned recently. The depth of the penetration is very useful also for the definitive depilation because the target, the piliferous follicle, is rather deep.

Beside the useable spot can have different diameters, till 10 mm, and this allows a great optimization of time during the session, especially when wide zones need to be treated.

Laser 532 nm

This type of laser has a wavelength of 532 nm and a more superficial target; it reads very well every type of red. For this reason it is more suitable in the treatment of face's capillaries, for the so-called couperose. The disappearance of capillaries is immediate, even if some sessions, in order to avoid an exaggerated irritation, are needed. However, it is a very soft laser and usually after the treatment you cannot see any scabs.

Is it possible to accurately treat the starry angiomas of face.

What can I treat with these lasers?

Treatment of teleangectasie on legs [<further information?>](#)

Treatment of couperose of face [<further information?>](#)

Treatment of angiomas, flat or starry [<further information?>](#)

Photo rejuvenation of face, neck and décolleté [<further information>](#)

Laser depilation [<further information>](#)

Contraindications

Tanned patients

Patients who need to expose to sun after few days

Patient who have cheloids' scars

Patients who had recent peelings in particular with isotretinoin

Patients with serious systemic diseases

Patients with dermatological diseases

Pregnancy