

LASER AND DARK SKINS

Last update on May 23rd 2023

Your dermatologist is proposing a laser treatment for depilation, to treat your erythro-couperosis of the face or varicosities of the lower limbs, to remove a tattoo or pigmentary spots, to obtain an anti-aging effect, or to treat scars in particular acne scars ... People with dark skin represent a wide variety of ethnic groups with different degrees of risk depending on the type of skin and the laser or energy-based device used, if it is invasive or not. Laser treatment in these patients always requires special precautions for the choice of the laser or the technique to be used, for adjusting the parameters and the rhythm of the sessions by the physician and for pre- and post-operative care by the patient.

RISKS

The main risks are pigment disorders, especially hyperpigmentation. You may have already seen this post-inflammatory hyperpigmentation on your skin as a brown spot after a daily life injury such as a small wound or a superficial burn. It usually disappears with time but can last for 12-18 months ... You will find the same thing with lasers even "appropriately dosed", because the light turns into heat at its target (hairs, vessels, dermis ...) to achieve its therapeutic effect. You should talk to your doctor before the act. Moreover, any skin burn that is insignificant on light skin can have more consequences on your dark skin: hyperpigmentation or hypopigmentation (white marks sometimes indelible), and even scar.

Depending on the device:

We prefer to use non-invasive devices with high wavelengths on dark skin in order to have less concurrence with melanin.

- **For depilation:** Nd: Yag 1064 nm laser offers a high safety for dark and even tanned skins, allowing to carry out sessions throughout the year. Diodes can also be used with safety. Except specific cases, alexandrite lasers and pulsed lights, apart from special cases, are not recommended and even prohibited for black skins.

- **Non-invasive techniques:** non-ablative radiofrequency, LEDs, ultrasound and cryolipolysis devices ... used under normal conditions do not have usually any risk on colored skins.

- As for ablative fractional lasers or radiofrequencies used for anti-aging or facial acne scars, pigment, vascular or resurfacing lasers, additional precautions are necessary, especially the choice of the season to perform these therapeutics.

They will only be performed during periods of less sunshine. We will choose the most "cold" techniques or parameters: Erbium laser rather than CO2 laser, CO2 laser with very short pulse duration and decreased parameters, invasive micro-needling radiofrequency with isolated microneedles preserving the epidermis ... Parameters will be adjusted downwards and it will sometimes take more sessions.

- **Removing tattoo:** a more or less prolonged hyperpigmentation is observed and there is a risk of depigmentation into white discolored halo, which can sometimes persist.

PREVENTION

- Information on risks, especially pigment risks, is crucial to obtain an informed consent from the patient (but all other 'usual' risks of the proposed technique should also be reported to the patient).

- The patient must comply as much as possible with the instructions for solar eviction.
 - Clothes, hats, glasses or opaque dressings for direct sunlight
 - Solar products wrongly called "sunscreens" because they do not protect at 100%
 - Application 20 minutes before going out
 - Sufficient quantity: 2 mg / cm² (half a teaspoon for the head and neck ...)
 - Repeat: every 2 to 4 hours or more often if sweating or swimming ...
 - Application of soft, non-irritating depigmenting cream to rest pigment cells before, during and after the sessions is often recommended. It should start at least 2 weeks before the first session and resume between sessions. You should stop the applications and contact your dermatologist if the cream irritates the skin.
 - To avoid post-inflammatory pigmentation, it is necessary to avoid ... inflammation:
 - Comply with the prescription of soothing or healing cream: quantity and duration
 - Comply with a local corticosteroid prescription if it has been done by your dermatologist: amount and duration
 - You should also notify your dermatologist to treat quickly in the first 8 to 10 days any unusual or persistent redness.

This information sheet recommended by the French Laser Society can be given to you by your dermatologist. Even if it is not sufficient to have an estimate, it helps to give the patient a clear information.

The information consultation provides clear explanations on expected outcomes, side effects and possible complications. There are not any reimbursement from social security or medical leave for these aesthetic treatments. Prices are mainly based on the area to be treated. The total cost is to be evaluated with the patient and is the subject of a signed quote.

A post-operative order and an advice sheet are given to the patient with the doctor's contact information.



Laser et Peau: **the French-language information site for patients, written by expert dermatologists from the Société Française des Lasers en Dermatologie.**

Everything you need to know about laser treatments, pulsed light, radiofrequency and other techniques for skin care or aesthetic applications.



SCAN ME