

#### TREATMENT OF STRETCH MARKS BY LASER

Last update on June 1st 2017

**Stretch marks** remain a frequent pathology and a source of important complexes for affected patients, but they are difficult to manage. They are presenting with linear streaks that are more or less wide, red or purple in the beginning, then white-pearly in color, hollowed out, with an "embossed" appearance, when getting older. Their locations are multiple: breast, belly, hips, inner thighs, buttocks, legs, arms ... Their causes are numerous: rarely medical (excess cortisol: treatments, tumors, puberty...) but they are mainly related to a rapid and too brutal stretching of the skin (growth, weight gain, pregnancy). There is a real individual inequality and therefore a genetic part. When the fibroblasts, which are responsible for the main synthesis of the dermis (skin matrix), abruptly cease their activity in a zone, a kind of fracture, of scar occurs in the skin, leading to the stretch mark that will never regress spontaneously.

### The main treatments except lasers are:

- The application of "stimulating" cream: None of the creams available in the trade or in pharmacy in free access has really proved its effectiveness. Prescription of acid vitamin A in the young patients can promote some degree of repair, it is generally applied with a cotton swab at the bottom of the stretch marks.
- Microdermabrasions: projection of thin aluminum crystals.
- Sandbrasion with liquefaction of the skin and healing under occlusion with significant risks of scarring.

# The main LASERS or energy-based or ROLLER-based treatment devices that can be used are:

- Vascular lasers: pulsed dye laser and pulsed lights
- Non-ablative fractional lasers and other non-ablative lasers
- Ablative fractional lasers (CO2 or Erbium)
- Micro-needle fractional radiofrequency
- Micro-rollers
- LEDs
- Combination of a vascular laser and a fractional device
- Combination of Laser (s) and LEDs

Fractional techniques and rollers are particularly suited to the application of stimulants or products containing hyaluronic acid after the session, to be repeated once or twice a day for 48 hours (as long as the "small holes" created by the devices are open and the applied products can cross the skin barrier). Be careful, not all the products can be used: it must be sterile and made for this indication. "Wild" applications by patients themselves or in beauty centers have resulted in very severe allergies that are prolonged and resistant to any treatment.

The choice of treatment will depend on the age and stage of the stretch marks, the patient's phototype (light or dark) and the equipment available to the physician.

<u>Red and fresh stretch marks:</u> Vascular lasers (pulsed dye laser or IPL), 3 to 4 sessions spaced by 2 months, if the type of skin is enough light, or a combination directly from the beginning: vascular lasers and laser or fractional radiofrequency and LEDs

White and hollow stretch marks: devices for remodeling and stimulating the synthesis of collagen to make "up" the stretch: fractional laser, combination of fractional devices, vascular and LEDs

<u>For dark skins, at risk of pigmentation:</u> Fractional device in non-thermal mode, that is to say fractional Erbium laser, fractional CO2 laser with high fluence and short pulses, fractional radiofrequencies or micro-roller, then exposure to a red LED.

If the area to be treated is large (high cost) it is more reasonable to start with testing sessions on a restricted area to see what can be achieved before deciding on a higher budget. Especially when the budget is "tight", it is necessary to wait 3 months to judge a test zone.

## **METHODS OF TREATMENT and follow-up**

The areas to be treated are photographed if possible.

Pain is possible and we can use an anesthetic cream under occlusion 1h30 before the sessions. After the session, a soothing cream rich in fragmented hyaluronic acid is applied and will be continued for at least 48 hours. Sun exposure is not recommended on treated areas as long as redness persists. After the session, we can observe: redness for a few days (purple or darker appearance, purpuric, with the pulsed dye laser), tightness, itching, pigmented spots in case of sun exposure too early after the sessions, and rarely superficial burns.

## **RESULTS**

The number of sessions required to obtain the result is variable and one must be patient. It usually takes 4 to 5 sessions to get a result. We often observe the best results on the chest. For the abdomen, the results are more random (improvement of the depth but sometimes insufficient for the patients). Finally, for the limbs, the results are more difficult to obtain and it is really necessary to carry out tests before deciding for large surfaces.

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.