

DAYLIGHT PHOTODYNAMIC THERAPY

Last update on June 1st 2017

Your dermatologist recommends to you a treatment of photodynamic therapy (cf specific sheet about conventional PDT) using natural daylight, which is easy of access and almost painless, to activate the photo-sensitizing cream during the illumination phase. Indication of this specific protocol is: multiple, thin, non-hyperkeratotic and non-pigmented solar keratosis of the face and scalp.

This protocol has a major advantage: being comfortable and almost completely painless, the photo-sensitizing substance being activated gradually in 2 hours after an incubation of only 30 minutes. International controlled and randomized studies already published have shown its non-inferiority compared to conventional PDT.

HOW DOES THE TREATMENT TAKE PLACE?

Your dermatologist often takes pictures of the lesions before starting the treatment to assess with you the benefit and follow-up.

1. Preparation at home: The patient is often asked to apply "keratolytic" creams to reduce the thickness of the lesions and to promote the penetration of light.

2. Preparation at the dermatologist's office: soft curettage with removal of scales and scabs, and sometimes superficial microperforation of the entire surface of the skin to be treated (lesion and its surroundings) to increase the penetration of the photosensitizer in order to increase the results

- Either by microneedling (small roller creating micro-holes in the skin)
- Smooth "sanding" with sterile abrasive paper
- Either by a laser session or radiofrequency with micro-needle split

3. Protection of treated and adjacent areas against "bad" sun rays ("UV") by SPF 50 sunscreen and clothing. For the treated areas, a special non-mineral sunscreen must be used, allowing the treating daylight part to pass through.

4. Application of Metvixia *

5. Incubation lasting only 30 minutes

6. Illumination by continuous exposure to daylight for 2 hours, non-stop, without going inside, otherwise the treatment could be painful and less effective. If there is no alternative, short breaks of up to 5 minutes are allowed. If necessary because you are inconvenienced, you can place yourself in a slightly shaded area. You can sit, walk or stand, but avoid intense efforts or sweating. Tolerance is excellent, at most you can experience slight to mild pain or tingling, especially at the end of treatment. This is the sign of an effective session. It is of course necessary to hydrate well, and to wear sunglasses.

Required weather conditions (otherwise the session must be postponed)

- Absence of rain
- Temperature above 10 ° C and below 35 ° C
- Sufficient light intensity according to latitude and time

In the South of France it is generally possible to treat from April to November; in the North of France, rather from April to September.

The schedule is adapted to the intensity of the UV, around noon during autumn, earlier in the morning during spring and summer.

7. After 2 hours of continuous exposure to daylight, you have to go inside and wipe off the excess cream with a compress and water. It is imperative to avoid any exposure to natural light for 48 hours and, if you must go out, it is necessary to cover the treated area with an occlusive dressing and / or a hat in order to limit a reactivation of the product, pain and excessive reaction (redness)

8. The follow-up is the same as for conventional PDT because this natural light source is very well tolerated, progressive but equally effective: pain and tingling until falling asleep, then with a maximum on the 3rd-4th day: redness, edema (swelling) especially in the periorbital area when the forehead is treated, then desquamation and renewal of the skin as after a peeling ... Adequate healing care will be prescribed to help you manage the healing process. Sometimes, a single session may be sufficient to achieve an optimal therapeutic result, but in other patients, several sessions may be necessary. After 1 to 3 months maximum, you will have to consult again to evaluate the result, and you will eventually have to benefit from a second session.

The expected results are a decrease in solar keratosis (up to 90%) and an improvement in the texture of the area: remodeling, less tugging, softer, dew, decreased stains and fine wrinkles...

WHAT ARE THE POSSIBLE SIDE EFFECTS?

(They are more important if your dermatologist has intensified the session by a technique of pro-penetration of the cream)

- Redness can last up to 2 months especially for light and sensitive skin but it will always fade spontaneously with the time.
- As for brown shadows of pigmentation, they can be observed for several months in people with dark skin (post-inflammatory hyperpigmentation). In the same way, they are always transient and disappear with time.
- Delayed scarring on aged and fragile skin (especially in the lower limbs)
- Allergy to Metvixia or to healing creams or dressings
- Inadequate efficacy and persistence of precancerous or cancerous lesions on the area: it is necessary to combine with other techniques
- Recurrences: more or less rapid according to the patients and the importance of the solar damage. This technique often requires maintenance sessions. It should be monitored regularly, at least once a year for 5 years or longer after all skin cancer even superficial. Sun protection is essential during the whole life (but especially during the first 3 months) to avoid relapses and to space the maintenance sessions.

The great advantage of using natural daylight compared to other light sources of PDT is the absence of pain, a decreased incubation time and patient autonomy for his treatment, with always excellent cosmetic results.

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 (aqueous disinfectant, healing or antibiotic ointment, sunscreen, etc.) and an advice sheet are given to the patient with the doctor's contact information.

For more information before the act, you can always see your doctor for a second consultation.



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.



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