

# THE PUVA PROCEDURE

### WHAT IS THE PUVA TREATMENT

### PUVA = psoralen + ultraviolet A

Artificial UVA light is an efficient treatment for many severe skin diseases, widely used by dermatologists for over a century. The PUVA treatment combines UV radiation with methoxypsoralen (8-MOP) that makes skin more sensitive to ultraviolet light and the treatment more efficient.

Many factors must be considered before assigning the PUVA treatment: the patient's skin phototype, age, previous and current treatment, etc.

### THE PROCEDURE

Depending on the diagnosis, a patient is assigned 15–35 PUVA sessions. They are usually performed on a regular basis on the same time of day, two to three times a week.

Bathwater PUVA is always supervised by a nurse. During the procedure, you will bathe for fifteen minutes in warm (38 °C) water with dissolved psoralen.

- While in the bath, move yourself constantly to stir the bathwater and avoid the active substance being settled and consequently irritating the skin.
- If a body part is not in the water, you can pour water on it yourself.
- If bathwater gets in your eye, dry your eyes immediately with a towel.
- If your face also needs the treatment, gently wipe it with a towel soaked in the bathwater.
- After taking the bath, gently dry yourself and avoid rubbing.

Bathing is followed by a UVA treatment in the UVA booth. Its walls are covered with fluorescent lamps and you will stand up during the procedure. During the first session, you will be tested for tolerance by exposing only a small area of the skin. The first UVA procedures only last a few seconds. Gradually, treatment time is extended to fifteen minutes. Protective goggles are used to cover the eyes.

# WHAT ELSE SHOULD YOU KNOW

- You should take an additional shower at home after each session to remove all remains of psoralen. Dry yourself gently with a clean towel.
- Bathwater PUVA treatment dries the skin. A dry and scaly skin reduces the efficiency of the treatment. You should use a moisturising base lotion at least twice a day, available at pharmacies. The moisturiser must not contain topical steroids, tar, oils, or vitamin A and D.
- For five hours after a session, protect yourself from sunlight, including the rays that might shine through the window. Cover all body parts that were bathed – wear shirts with long sleeves, long pants and socks, protect your face, neck, and hands with sunscreen (SPF 50). Sunglasses are not obligatory after the procedure.
- In the course of the treatment, do not sunbathe or go to a tanning salon.
- Inform your doctor or your nurse of all medications that you are using or are planning to use.
- Avoid eating celery, parsnip, and figs for at least two hours before a session because they contain photosensibilitating substances.
- In the course of the treatment, avoid cosmetic procedures that make skin more sensitive to light, i.e. peeling, dermabrasion, etc.

### SIDE EFFECTS

Most side effects reduce in a couple of days after the session spontaneously or with the help of base lotions.

Redness of skin (erythema) – sometimes, after the treatment, the skin could develop a redness that resembles a sunburn. If the redness intensifies in a couple of days, use topical hormone creams and disrupt the sessions until your skin is fully recovered. An intense redness with blisters is rare. In case it happens, inform the nurse who supervised your session (by phone 617 2974). They must adjust the dose of UV light.

Dryness of the skin could last up to four weeks after the treatment. Use a moisturising base lotion at least twice a day. Moisturising the skin is part of the treatment.

Inflammation (folliculitis) is usually not overly uncomfortable; it does not require special care or disruption of the treatment. Use moisturising base lotions for prevention.

Herpes simplex – if you have previously had this infection, it might intensify in the course of the treatment. Use a lip balm with SPF, available at pharmacies. Your doctor might also assign preventative therapy with acyclovir.

Light sensitivity of the skin (photosensitivity) – if you have previously been diagnosed with a skin disease that is caused by sunlight or that intensifies in the sun (photodermatitis), it might escalate.

Itching – usually lasts for a few days after the procedure. Use base lotions that relieve itching. Keep the lotion in a refrigerator, because a cooled-down lotion provides additional relief.

Hyperpigmentation – often occurs with recurring PUVA treatments. Is more likely to develop when using isotretinoin or topical vitamin D analogues.

# **DELAYED SIDE EFFECTS**

Skin cancer – because PUVA is a mutagenic and immunosuppressive therapy, recurring treatment (over 200 sessions) may cause skin cancer. The risk is higher with skin phototype I/II or if you concurrently use methotrexate, ciclosporin, or receive an additional UVB treatment.

Premature aging of the skin – wrinkles and lines, loss of elasticity, dryness, keratosis, and hyperpigmentation are associated with the PUVA treatment.

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