

Department of Dermatology, Churchill Hospital

PUVA Treatment

information for patients



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What is PUVA?

PUVA is a combination treatment consisting of taking a drug PSORALEN (P) and then exposing the skin to long-wave ultra-violet light (UVA) – hence the term PUVA.

Psoralen is a drug that makes the skin temporarily sensitive to UVA. It may be taken as pills by mouth or by applying it directly to the skin.

The ultra-violet light is emitted by special fluorescent light tubes. These are only available in certain hospitals so patients have to travel to hospital for PUVA treatment, usually twice weekly. A course of PUVA treatment will require a variable number of visits to hospital (depending upon the condition being treated).

What conditions are treated with PUVA?

PUVA has been shown to be useful for a number of skin conditions, e.g. psoriasis, eczema, polymorphic light eruption, mycosis fungoides. However, it has some disadvantages and occasional side-effects, so PUVA is only used when other well-tried therapies have failed.

The information in this booklet applies to ALL patients undergoing PUVA treatment, regardless of their diagnosis. The duration of each treatment lasts only minutes, and is gradually lengthened over the treatment course. However, for separate conditions there may be some differences in the frequency and length of individual treatments, the length of the whole treatment course and also the effectiveness of PUVA.

How is PUVA given?

The dosage and number of PUVA treatments will be advised by the Doctor and the Specialist Light Treatment Nurse

The psoralen tablets are taken by mouth. Two hours later the drug has reached the skin and the UVA treatment is carried out. The patient stands undressed in a specially designed cabinet containing fluorescent light tubes. Men should wear a dark jock strap or sock to protect the genital area.

The psoralen tablets make not only the skin but also the eyes sensitive to ultraviolet light. This effect lasts for about 24 hours. During the time actually in the UVA cabinet the eyes must be protected with small goggles. At all other times suitable protective spectacles must be worn (see page 8) **BOTH INDOORS AND OUTDOORS**, from the time the tablets are taken until bedtime on the treatment day. This is because the eyes are made sensitive to all light including daylight, fluorescent and halogen lighting.

For the same reason, after taking the tablets, patients must avoid prolonged exposure of the skin to direct sunlight (even through window glass). This is to prevent sunburn, which could be severe

Oral Psoralen-UVA

Tablets

Most patients will need to take the psoralen as tablets before PUVA treatment. This is particularly so if their skin condition is widespread. Most people are given tablets called 8-MOP. The number taken depends upon body size.

The **8-MOP** tablets are taken **two hours** before treatment. It is best to take the tablets with a small amount of food. Taking the tablets on an empty stomach may lead to a feeling of nausea.

Occasionally a different tablet is used called **5-MOP**.

The timing is important, so please ensure you take the correct number of tablets at the correct time of day.

Gel

Those patients with only a small area of skin requiring treatment (e.g. psoriasis of the palms or soles) may be treated with 8-MOP gel rather than tablets. There is a separate booklet dealing with Hand and Foot PUVA.

Other skin treatments used with PUVA

Emollients

All patients having PUVA are advised to use regular skin emollients (moisturizers) to combat dryness and irritation and to aid penetration of light through the skin making it more effective. Emollients should be applied twice daily.

Any of the following emollients is suitable for PUVA patients:

Cetraben cream

Diprobase cream

50:50 liquid paraffin/white soft paraffin

Coconut oil

Other prescribed creams

Some patients will be advised to use other creams during the course of PUVA eg tar creams or lotion, vitamin D and steroid ointment (calcipotriol/ betametason valerate; DovobetTM,) steroid creams. These should be used as prescribed. Generally, they should be applied AFTER the PUVA session on that day has been completed and on the intervening days before the next PUVA session.

Tablets

Some patients are advised to combine their PUVA treatment with a drug (eg acitretin, NeotigasonTM) that helps to make PUVA more effective.

What are the possible immediate side effects?

- PUVA sometimes produces a sunburn-like reaction, particularly in patients with a fair complexion. This can be avoided by careful supervision of UVA doses by the staff in the PUVA Unit. Sensitive areas may need to be covered for all or part of the treatment.
- A temporary pricking or itching of the skin may also occur after treatment and will be helped by moisturizing creams or antihistamine tablets.
- Psoralen tablets occasionally cause nausea especially in the first week or two.
- PUVA usually leads to tanning of the skin. This will fade over a month or two after finishing PUVA treatment. Although the skin appears well tanned it may still burn easily in the sun.
- Dryness of the skin is common and requires the use of moisturizing creams or ointments
- Very rarely severe itching can occur which may last for several weeks after the end of the course of PUVA

You should make the Light Therapy Nurse aware of any problems or side effects you may be getting

What precautions should be taken?

Before starting PUVA and during the whole course you should:

- Inform the doctor or nurse about any pills, creams or ointments that may have been prescribed elsewhere.
- Avoid significant alcohol consumption.
- Avoid perfumes, after-shave lotions or other cosmetics. These may make your skin even more sensitive to ultraviolet light.

- Avoid any other forms of ultraviolet light e.g. solarium, sun-bed or sun-bathing.
- Men should wear dark, close-weave jock-strap or sock to protect the genital area during treatment.
- Drastic alterations of hair length should be avoided during your course of treatment, especially after the first 2 weeks.
- For 24 hours after taking your tablets you must protect your eyes and skin from ultraviolet light, the damaging light that you cannot see.
 1. shield your skin from sunlight with suitable clothing, e.g. hat, scarf, gloves even on overcast days.
 2. protect your eyes to avoid the risk of cataracts. You will need to buy some protective eyewear before your PUVA treatment begins, e.g.
 - Sunglasses from any reputable retailer “labeled UV400”, meaning they cut out the damaging UV (should be labelled with the European standard EN 1836-2005)
 - Clear coatings applied (via opticians) to any plastic lenses (prescription or non-prescription). They cannot be applied to glass lenses.
 - UV sunshields. If you need to wear a spectacle prescription all the time, you would be able to wear your own spectacles underneath UV sunshields. UV sunshields are available to purchase from the Spectacles Dispensary at the Eye Hospital, West Wing, John Radcliffe Hospital. (01865 234 486, open Mon-Fri 9am-2pm)

What about long-term side-effects?

All the long-term side effects of PUVA are related to the total amount received:

- skin dryness freckling and wrinkling occur after months or years of PUVA treatment.
- Increased risk of sun-related skin cancer later in life especially with the higher doses of PUVA. Skin cancers are nearly always readily curable.
- Damage to the lens in the eye leading to cataracts. This is not a risk if suitable eye protection is worn.
- PUVA should not be used in pregnancy although there is no evidence that it damages the unborn baby.

PUVA for Psoriasis

Psoriasis is a common skin disorder which varies in severity and extent. Neither PUVA nor any other treatment produces a permanent cure. PUVA is usually reserved for patients whose psoriasis is severe or is not responding adequately to other treatments. In most patients PUVA is effective at clearing psoriasis although psoriasis in body areas shielded from light (eg scalp, body folds) may not clear satisfactorily with PUVA.

Initially most patients have their treatment twice a week. The first few treatments will be short (under 3 minutes). The length of treatment is gradually increased, depending on response, to a maximum of about 10-15 minutes per session.

Most patients will have their psoriasis cleared after 6-8 weeks of treatment. PUVA is then stopped and the skin usually remains clear for some months. However, the psoriasis may flare up again, and further treatment may be necessary.

Those few cases of psoriasis which appear to be resistant to PUVA may still be helped by combining PUVA with other treatments.

PUVA for other conditions

Eczema

PUVA is occasionally used for more severe cases of eczema. Frequency and dosage of treatment are similar to that used for psoriasis (see above). However, a course of PUVA may need to be more prolonged than that generally required for psoriasis.

Mycosis Fungoides

For this rare skin condition, PUVA is usually given twice a week at first. Lower doses of PUVA are used than those for psoriasis. If PUVA is stopped, the condition sometimes relapses and further treatment may be needed.

Polymorphic Light Eruption

This is a common light sensitivity disorder. A 4-6 week short-exposure course of PUVA in the spring or early summer usually gives patients good protection for the remainder of the summer. However, further courses of treatment are necessary if protection is required in subsequent years.

Vitiligo

Patients with this condition have areas of completely white depigmented skin. This may be cosmetically embarrassing. PUVA can sometimes bring about a certain amount of repigmentation. This is particularly so for vitiligo of the face, and in dark-skinned patients. Results for other body sites and in white-skinned patients are much less encouraging. For maximum repigmentation, it is often necessary to treat three times a week for up to one year or even longer. Even then, complete repigmentation cannot be guaranteed and relapse is possible.

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