Treatment with PUVA

Phototherapy Department
Your Consultant has referred you for a course of PUVA. This leaflet explains this treatment in detail including the risks, benefits and what the treatment will involve.

**What is PUVA?**

Ultraviolet (UV) rays are produced by the sun. Although they can’t be seen, they are an important part of sunlight and are grouped into different wavelengths: UVA, UVB and UVC.

PUVA is a combination of a drug called psoralen (P) and long wave ultraviolet radiation (UVA). UVA rays penetrate skin and cause it to darken or tan.

**What can PUVA treat?**

It is mainly used to treat psoriasis, eczema, vitiligo, mycosis fungoides and polymorphic light eruption.

**What does treatment involve?**

The psoralen medication is taken by mouth at home two or three hours (depending on the type of psoralen) prior to your treatment. The psoralen dose will have been prescribed by the doctor. Your treatment will be given by a specially trained Phototherapist. You will need to undress and stand in a phototherapy machine. This is a cabinet containing fluorescent tubes that produce UVA rays. Each machine is screened off to make sure your treatment is given in private.

You will be given a calculated dose of PUVA and then continue treatment 2 or 3 times per week for several months. You may feel a warm sensation during treatment, but it will not hurt.
Benefits of PUVA treatment?

This treatment aims to improve your skin condition and it is sometimes used in combination with ointments and creams.

Compared to other forms of phototherapy, PUVA has the following benefits:

- For many conditions you are more likely to have longer periods where your skin conditions disappears or improves with PUVA than narrowband UVB.
- For a number of conditions (though not all) PUVA is more effective than narrowband UVB.

Alternatives

Your doctor has recommended this is the most appropriate treatment for you. However, there may be alternatives such as narrowband UVB, tablets or creams/ointments. Your doctor will have explained alternatives to you.

Consent

When you discussed this treatment with the Consultant you will have signed a consent form. You will be asked to confirm this consent on your initial phototherapy assessment.
On the day of your treatment

You will have an initial assessment and be asked lots of questions about your general health. In particular please let us know if you suffer from rosacea or have a history of cold sores.

**Do not wear perfumes, deodorants, aftershave, lotions or other cosmetic products before your treatment.** Some of these contain substances, which make your skin more sensitive to light (photosensitisers). You can use these after each treatment. For the same reason, please let us know if you have **started any new medications or creams**. This includes non-prescribed medication. It is advised to refrain from eating figs, celery, parsley, citrus fruits and strawberries in large quantities prior to your treatment as these are also photosensitisers.

**It is not possible to treat patients safely if under the influence of alcohol.**

**On treatment days please do not apply any creams or ointments to your skin before you go in the machine apart from a water based moisturiser**, such as Aqueous cream, E45 or Diprobase. Do not use oily creams, as these could cause burning and prevent the UVA from being absorbed. We suggest that you moisturise beforehand with a water based moisturiser, such as those listed above as this helps your skin to absorb the ultraviolet light.

If you are not sure which creams you can use, please ask a member of the phototherapy staff.

**Reduce your exposure to the sun’s rays, even through window glass, to minimise risk of sunburn. PUVA can cause unpleasant sunburn-type reactions if this is not adhered to.** As the drug Psoralen increases your sensitivity to sunlight, you must reduce your exposure to the sun’s rays, even through window glass for 24 hours after treatment. Cover up with loose fitting long-sleeved clothing and a hat if you do not have a lot of scalp hair. Use a sunscreen with a factor of at least 20 that protects against UVA and UVB rays. This must be washed off prior to treatment. You must not sunbathe or use a sun bed during the whole course of your treatment.
Let us know prior to your each treatment if you are exposing any areas of skin that have not been exposed to the ultraviolet light before e.g. recently removed facial hair or if you have had a haircut which exposes previously unexposed skin.

**Glasses**

If you are having the psoralen as a tablet, you must wear glasses, either your own sunglasses or clear glasses supplied by your optician with special UV filters, from the time when you take the psoralen tablets until nightfall after treatment. (24 hours if you have existing cataracts) This protects your eyes against damage from PUVA. Your glasses need to be marked UV400 but must be checked by us prior to treatment to ensure they give you adequate eye protection.

**What happens during treatment?**

Check in at the check in machine. At your first visit you may need to have a light test, which allows us to see your skin’s tolerance to PUVA. We may need this to calculate your starting dose. You will need to come back 96 hours afterwards, so we can examine the site where you had the light test. We will then be able to start your treatment.

We usually ask that you remove all your clothing and jewellery, although you can keep your underwear on if this area is not affected. However, men must either wear dark underwear or cover their genitalia with a sock or jock strap while in the machine. If you wear underwear, please make sure it covers the same area on each visit. If an area of skin that has previously been covered is exposed to the PUVA treatment, it may burn.

We will give you goggles to protect your eyes and tell you how to stand in the machine. This is to make sure all your affected skin receives the PUVA rays and to ensure that all of your skin is exposed evenly each time.

The time that you are in the machine will depend on many factors such as your skin type (fair or dark) and skin condition. Your starting dose of PUVA may only be a few seconds and then gradually built up. We will increase the dose of PUVA slightly with each treatment depending on
your skin's response to treatment and provided no treatments are missed. Please allow 10-30 minutes for your treatment, to allow time for changing.

The machine is quite bright and you may feel warm if you need to stay in the machine for a long time. Let us know if you find it uncomfortable, as we can give your treatment in divided doses.

**How often will I need to have this treatment?**

This depends on your skin condition but this treatment is usually quite intensive. We generally give treatments two times a week for about 10 weeks, though this length is different for the treatment of different skin conditions. If you know this is going to be difficult please discuss with the therapist.

We do our best to keep to your appointment time, but occasionally there may be a short queue. Please ask one of the Phototherapists if you are concerned about your waiting time.

**What are the risks?**

Your doctor or nurse will have discussed the possible complications of this treatment with you in more detail, but you need to be aware of the following:

- **Your skin can occasionally become itchy and dry**
  This may last for a few days after treatment. Use increased emollients.

- **Some patients feel nauseous after taking the psoralen tablets**
  Always take psoralen after food. Eating bananas and ginger biscuits may help with potential nausea. For other advice please speak to your Phototherapist.

- **Your skin condition could temporarily worsen**
  Please report all changes in your skin to your Phototherapist.

- **Exacerbation of cold sores (herpes simplex)**
  If you have a history of cold sores this could be triggered by the treatment. Please tell the Phototherapist when first seen who may advise you to purchase lip sun block.
Long-term use of PUVA (many months to years) ages the skin and increases the risk of developing skin cancer. This increased risk is slight at first, but increases after about 150-200 treatments. It is therefore unusual for us to give patients more than 150-200 PUVA treatments in a lifetime.

If you do not wear the protective goggles in the unit, you risk developing **sunburn like reaction to your eyes** within a few hours of exposure. You may open your eyes during treatment only when you are wearing the protective goggles provided. If you do suffer any reactions to the eyes contact us immediately and in the event you are unable to speak to us visit your local A&E department. In the long term, it is possible that a lot of PUVA treatment increases the risk of developing cataracts in the eyes. This risk is very low as long as you wear the glasses and goggles as advised.

Although there is no evidence that PUVA can damage a developing foetus, nevertheless if pregnancy is suspected it is advisable for absolute safety for the baby to stop PUVA until delivery, particularly if the psoralen is being taken in the tablet form.

**Adverse reactions**

The following reactions are extremely unlikely and can occur up to 96 hours after your treatment.

- You may develop some **mild pinkness of your skin** after your treatment which settles quickly. Please ensure you inform your Phototherapist at your next treatment.

- You may develop some **pinkness and soreness of the skin** after your treatment. Please ensure you use increased emollients, drink increased fluids and take analgesics as appropriate. Please contact us on the number provided. In the unlikely event you develop **redness of the skin with blisters and possibly headache and vomiting**, carry out the above advice and contact us immediately. If you are unable to speak to us visit your GP or local A&E department where topical or oral steroids may be prescribed.
Very occasionally patients develop polymorphic light eruption (PLE), which is an itchy rash due to sunlight. Use emollients and discuss with your GP/pharmacist whether antihistamines are appropriate. Please ensure you inform your Phototherapist at your next treatment. Your dosage of treatment may be modified.

If you develop intense itching of the skin, use increased emollients and discuss with your GP/pharmacist whether antihistamines are appropriate. Please ensure you inform your Phototherapist at your next treatment.

If you develop blisters unassociated with sunburn like reactions please contact us immediately.

Painful white or yellow discolouration of nails
Please ensure you inform your Phototherapist at your next treatment.

UVA is most suitable for people with extensive skin problems, but may not be appropriate for you if you have very fair skin, or if your condition becomes worse in sunlight.

It is also important to note that your skin condition may flare up again. If it does, you will need further treatments of PUVA or other another type of treatment in the future to manage it.

What I need to do after my treatment?

You may want to apply your moisturiser or other creams and ointments after your treatment and get dressed. You will be able to book up to 4 follow-up appointments in advance. Please remember to keep all your appointments and let us know if you cannot attend for any reason. If a follow-up appointment with the Consultant is required, you will be advised on how to book this by the Phototherapist.

Continue to cover up with loose fitting, long sleeved clothes and hat as necessary. Cover exposed skin with sunscreen. This needs to be at least factor 20 that protects against UVA and UVB rays. Re-apply regularly on sunny days and you may need to wear a hat if you have little hair. Checked glasses must be worn until nightfall after treatment.
What if I am unable to attend treatment?

Please inform the physiotherapy reception on 01483 464153. The treatment is less effective if there are gaps in the treatment e.g. holidays and cancelled appointments. Please try to avoid this in order to achieve best clinical outcome. If you have a holiday booked please let us know when we initially contact you as we may defer the start of your treatment until after your holiday.

Reference source

Phototherapy guidelines – St Johns Institute of Dermatology, St Thomas’ Hospital, London
Royal Surrey County Hospital – contact information

Physiotherapy Reception: 01483 464153
A&E Reception: 01483 464156
Dr Wong’s Secretary: 01483 464167

At the time of publishing the phototherapy service runs between 6.45–9.30 each weekday morning. Some sessions run for longer.

Details of psoriasis association: www.psoriasis-association.org.uk

Compiled by Deb Hughes and Michelle Dawson (Physiotherapy) using information obtained from St Thomas’ Hospital NHS Trust
Royal Surrey County Hospital (RSCH) NHS Foundation Trust fully subscribes to the National Patient Safety Agency (NPSA) *Being Open* best practice framework, November 2010.

**PALS and Advocacy contact details**

Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located in far left corner as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

**Telephone:** 01483 402757  
**Email:** rsc-tr.pals@nhs.net  
**Opening hours:** 9.00am–4.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.

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