Department of Dermatology

Natural Daylight Photodynamic Therapy (ND-PTD)

Information for patients
What is natural daylight photodynamic therapy?

Natural daylight photodynamic therapy (ND-PDT) is a simple, non-invasive procedure which is used to treat pre-cancerous skin lesions. The treatment involves applying a cream called Metvix to the affected area of skin. Natural daylight (photodynamic therapy) is then used to activate the Metvix, which destroys the abnormal cells but does not affect healthy tissue. The affected area may require two treatments.

Is this the right treatment for me?

If you have large areas of sun-damaged skin, or you have been diagnosed with pre-cancerous skin lesions called actinic keratoses or Bowen's disease, then ND-PDT is a suitable treatment option for you.

An alternative is conventional photodynamic therapy (PDT), where we use an indoor light source. The main disadvantage of conventional PDT is the level of discomfort. You may have already had this treatment before. Your Dermatologist will discuss the various alternative treatments with you.

ND-PDT is a recently licensed treatment and is not available at all NHS Trusts. Although this is a relatively new treatment to Oxford University Hospitals NHS Foundation Trust, it is a treatment widely used across Europe and so the benefits and side effects of the treatment are well-established.

It is very important that you tell the staff if you have any allergies (especially to peanut oil, soya or almond oil) or have any heart problems, have a pacemaker or have any major health conditions. This may affect whether it is safe for you to have the treatment.
Who will carry out my treatment?

ND-PDT is a treatment which is provided by nurses. Your PDT nurse will need to check some details with you before you begin your treatment.

When you arrive at the department, please report to the Dermatology reception desk, where you will be directed to the correct waiting area. Your ND-PDT nurse will call you when it is time for your treatment.

Preparing for your treatment

Before you come for your treatment, please do not apply any sunscreen, moisturiser or other skin products, including make-up, as these may affect the ND-PTD treatment.

What does the treatment involve?

You will be asked to sign a consent form to confirm that you are happy to receive the treatment. The nurse will then apply a sunscreen with SPF 30 or higher to the treatment area. This will protect your skin from the ultraviolet light rays but will not block the daylight. This will take approximately 15-20 minutes to be absorbed into your skin. The hospital will provide this sunscreen.

Your nurse will then prepare the lesion(s) by cleaning your skin and gently removing any overlying crusting skin. They will then apply the Metvix cream to the lesion(s). You will need to leave the affected area uncovered.
What happens next?

You will be asked to wait for 15-30 minutes before your daylight exposure can begin.

Your nurse will then take you to the Dermatology Garden. This is an outdoor area, near to the Dermatology department. You will need to stay in this area, in the daylight, for two hours. This activates the Metvix, which then begins to destroy the abnormal cells. You can visit the toilet if you need to, but if you leave the area for any longer then you may need to stay outside for more than two hours, to make up for the time missed.

Even on an overcast day there is enough daylight exposure, if you are outside.

If the outside temperature is at least 12-14°C the treatment will take place in the Dermatology Garden. If it is too cold, you will have your treatment inside a glass conservatory in Sobell House at the Churchill Hospital (you will be shown where this is on a Churchill Hospital site map).

If it is raining, the PDT nurse will contact you by telephone in advance to tell you that the treatment is being postponed.

It is only necessary to expose the treated area. However, we do recommend that you bring along and use your own sunscreen (at least SPF 30) or clothing to protect the rest of your skin which is exposed during the treatment time.
What are the side effects?

The main side effect of the treatment is that you may experience mild tingling or pain in the treated area of skin.

We will give you a water spray bottle for you to use during the treatment. This can help to soothe any sensation of discomfort on your skin.

What should I bring with me?

- sunscreen SPF 30 or higher
- some food and drink (we are able to provide water to drink)
- reading material
- hat
- long-sleeved top, full length trousers or long skirt.

You may want to bring a friend or relative to sit with you during your daylight exposure, to keep you company. We would advise that they also bring adequate sun protection (SPF 30 or higher).
What should I do after the treatment?

The nurse will collect you when your treatment has finished. If you are in the conservatory in Sobell House, we ask that you make your way back to the Dermatology department to see the PDT Nurse at the end of your treatment. The nurse will give you a written card before you go to the conservatory, which confirms the time when you need to return.

The Metvix cream will then be wiped off and a dressing may be applied, depending on the size and site of the area treated.

You will need to:

- Keep the area dry and stay indoors or cover the area, avoiding strong window light, until the following day. If this is not possible, sunscreens, a scarf, hat or a dressing should be used to cover the treated area for the rest of the day.

- You may shower and bathe as normal.

The area may weep a little and form a crust. Use a non-scented moisturiser or Vaseline (petroleum jelly) to prevent the area from forming a scab. If you feel that the area is becoming red, painful or weeping a lot, please contact the Dermatology department (see telephone numbers on page 7).

You will be asked to come to a follow-up clinic appointment in three months, to assess the outcome of your treatment.
How many treatments do I need to have?

Sometimes two treatments of natural daylight PDT are needed. You will be advised by the PDT Nurse or Dermatology Doctor if you need to return for a second treatment. If you need two treatments you will be given an appointment to return in one week, when the process will be repeated. Before you return, please continue to use appropriate sun protection (e.g. sunscreens with SPF 30 or above or clothing to cover the areas treated).

Who should I contact if I have questions?

If you have questions about which treatment is best for you, please speak to your Dermatologist. Their contact number will be on your appointment letter.

If you wish to discuss specific issues about ND-PDT treatment, please call to speak to a PDT Nurse.

Tel: 01865 228 241 or 01865 228 212
(9.00am to 5.00pm, Monday to Friday)
If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call 01865 221 473 or email PALS@ouh.nhs.uk