NB-UVB phototherapy

Your doctor has referred you to the Dowling Phototherapy Unit for a course of narrowband UVB (NB-UVB) phototherapy to treat your skin condition. This leaflet explains about this treatment in detail, including its benefits, risks and alternatives. If you have any questions or concerns, please speak to a doctor or nurse caring for you.

What is phototherapy?
Natural sunlight has been known to be beneficial in certain skin disorders for thousands of years. The ultraviolet part of the radiation produced by the sun (UVR) is used in phototherapy. Although it can’t be seen, it is an important part of sunlight and is divided into ultraviolet A (UVA) and ultraviolet B (UVB) wavelengths. UVA rays go deeper into the skin than other types of UVR and can cause the skin to tan. UVB rays do not penetrate as deeply but can cause the skin to burn. In phototherapy we use carefully calculated doses of UVB to minimise this risk.

What is UVB?
UVB stands for ultraviolet B. Narrowband UVB (NB-UVB) is a treatment where a small part of the UVB light spectrum is used to treat skin conditions. Treatment lamps produce these special rays, which have anti-inflammatory effects on the skin. Although these rays are also present in natural sunlight, UVB treatment is usually more effective than sunlight because harmful and ineffective sunlight rays are filtered out. In this way, we also minimise the risk of burning.

Are there any other types of phototherapy?
The other phototherapy treatments are PUVA (psoralen plus UVA, where UVA radiation is combined with a chemical called psoralen that increases the effect of UVA on the skin) and UVA1. The choice of phototherapy treatment depends upon your skin condition.

Why am I having this treatment?
This is the most suitable treatment for your skin condition. It is often recommended if you have tried ointments and creams without success but before trying tablet medication. NB-UVB has been found to be useful for many different skin conditions, including psoriasis, eczema and vitiligo. NB-UVB is also used to build up tolerance to natural ultraviolet light in people with light-sensitive skin conditions. Most people find that their skin has improved after about 30 treatments and that it remains clear for three to four months or more. However, the number of treatments needed and the results of the treatment vary from one person to another and from one skin disease to another.

Important points to remember before and during your treatment

- You need to commit to attending the Phototherapy Department two to three times a week. Attending regularly helps to achieve better results from your treatment.
- Reduce your exposure to the sun to minimise the risk of sunburn. Cover up with long-sleeved clothes, particularly on sunny days. You may also need to wear a hat. Use a sunscreen with a sun protection factor (SPF) of a least 50 and a UVA seal of protection, and reapply it regularly. Please do not sunbathe or use a sunbed during the whole course of your treatment.
Let us know if you have a haircut or if, for any other reason, any areas of skin become newly exposed during the course of treatment. If you wear clothing during your treatment, it is important that you wear the same clothing or the exact same style for every treatment of your course.

Before you start UVB treatment, the doctor and nurse will check the medicines that you are taking. If any medications you are taking (including anything bought over the counter) change during your UVB treatment, please let the nursing staff know before they start your next treatment. This is because some tablets can affect the way your skin reacts to UVB.

Men must wear genital protection while in the machine.

If you are planning a pregnancy or think that there is a chance you could become pregnant during the treatment, we advise that you take the recommended pre-pregnancy folic acid supplements.

On the day of your treatment

- 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. This can cause patchy discolouration of the skin and take some months to fade. You can use them after each treatment.
- Please let us know if you have started any new medications or creams as some can make your skin more sensitive to light.
- On treatment days, please do not apply any creams or ointments to your skin before you go in the machine apart from an appropriate moisturiser. We suggest that you moisturise with a water-based moisturiser beforehand as this helps your skin to absorb the ultraviolet light. Please ask your nursing team for more information on this.
- Do not use oily creams as these could cause burning or prevent the UVA from being absorbed.

What can I expect on my first treatment?
On your first visit to the unit you will have a pre-treatment nursing assessment. A member of the phototherapy nursing staff will also show you round the unit and will explain the treatment and all the procedures to you. Before you begin light treatment, you will usually receive a series of small test doses, called MED (minimal erythema dose). A number of doses of UVB light will be shone on your back or arm, this takes about 25 minutes and the result will be read 24 hours later. This result will help us decide what your starting dose should be. This may also be important if you suspect you are unusually sensitive to sunlight or if you are taking medications that make you extra sensitive. Otherwise, we may simply ask you about your history of sun exposure, for example whether you tan or burn, and use your skin type to determine your starting dose. Even if you have had UVB treatment in the past, an MED will normally be required because your sensitivity to UVB can change. The MED not only makes sure that you are treated at a safe UVB dose, but also that you are started at a dose that is high enough. If an MED cannot be done, treatment has to be started at a low dose, and often the first treatment will be to a small test area such as the forearm.

Your first treatment in the phototherapy machine will only happen on your second visit.
What happens during treatment?
The nurse will call you from the waiting room when the machine is available for your treatment. They will examine your skin on each visit and ask you some questions before you enter the machine. We will give you goggles to protect your eyes, which you must wear at all times during your treatment. We will show you how to stand in the correct position in the machine to make sure that all your skin is exposed evenly.

You will be in the UVB machine for up to 10 minutes. We closely monitor the amount of UVB you receive and we will increase the dose with each treatment as long as you have tolerated the previous treatment. The machine is quite bright and you may feel warm if you need to stay in the booth for a long time. Please let the nursing staff know if you feel uncomfortable or unwell.

How long do treatments last?
This depends on your skin condition and varies from person to person. We generally give treatments two to three times a week for 12 to 16 weeks. Individual treatments last up to 10 minutes, with the total visit taking up to half an hour. The total number of treatments you have will depend on your response to treatment and on your specific skin condition.

What are the risks with UVB phototherapy?
Your doctor or nurse will discuss the possible complications of this treatment with you in more detail, but you need to be aware of the possible side effects listed below.

Effects that could happen during your course

- It is likely that you will get a mild sunburn reaction at least once during your course. If you get any severe sunburn-like reactions then you should contact the Phototherapy Unit and speak to one of the photo nurses. If there is any delay in getting further advice, you can apply steroid ointment (if you have some) as well as moisturisers.
- You may get a spotty, itchy rash (prickly heat). This affects about 1 in 10 people.
- If your skin goes brown easily in sunlight you may develop a dark tan.
- Your skin may become dry and itchy. Regular use of moisturisers will help to minimise this.
- Cold sores may affect 1 in 30 people who have UVB phototherapy to the facial area. Tell your nurse if you notice early signs of a cold sore such as tingling or a painful bump developing on your lips. If you have a history of cold sores we will apply sunblock to your lips before each treatment.
- The disease being treated may worsen instead of improve. Your doctor will advise you of the risk of this happening.

Risks associated with multiple courses

Skin cancer
People who have had a lot of sunlight exposure have an increased risk of cancer. In the UK approximately 1 in 10 of us will develop skin cancer. Although we do not know the risk of NB-UVB, if we assume that it is the same as with sunlight, a course every year over the whole of someone’s life would generally double the risk of them developing treatable skin cancer. Many factors influence this risk. If you are not having your face treated, the risk will be reduced. It is usual practice to be asked to attend your local clinic for a skin cancer review once you have received more than 500 UVB treatments.
Photoaging
If you need many treatments you may develop sunlight-induced skin changes, such as wrinkling and skin discolouration, similar to those of the ageing process or produced by cigarette smoking.

Will I have any follow-up appointments?
You will usually have a follow-up appointment with a doctor six months after your treatment, or sooner if you are having problems. You will be able to book your appointments in advance. Generally you will be offered appointments as near to your preferred time slot as possible, however we cannot guarantee the same time slot for all your visits.

Consent - asking for your consent
We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves.

If you would like more information about our consent process, please speak to a member of staff caring for you.

Contact us
If you have any questions or concerns about your treatment, please contact the Dowling Phototherapy Department, t: 020 7188 6290 (Monday to Friday, 7.30am-5.30pm)

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit w: www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline
If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.
t: 020 7188 8748, Monday to Friday, 9am to 5pm

Your comments and concerns
For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.
t: 020 7188 8801 (PALS)   e: pals@gstt.nhs.uk
t: 020 7188 3514 (complaints)   e: complaints2@gstt.nhs.uk

Language and accessible support services
If you need an interpreter or information about your care in a different language or format, please get in touch.
t: 020 7188 8815   e: languagesupport@gstt.nhs.uk

NHS 111
Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.
t: 111   w: 111.nhs.uk