# Patient Information

# **Physiotherapy**

Date:

08/07/2020

**Review Date:** 

08/07/2023

**Version Code:** 

V1.07.20

**Reviewers:** 

Head of Therapies: Anna Williamson

Clinical Lead UVB Physiotherapist: Emma Redfern

# **Contact Information:**

Tel: 0207 234 2500

Email: lbh.physiotherapy@hcahealthcare.co.uk

London Bridge Hospital

part of HCAHealthcare UK

# Treating your skin with Narrowband UVB radiation

Your consultant has referred you to the physiotherapy clinic for a course of narrowband Ultraviolet Treatment (also known as TL-01 or UVB) for your skin condition. This leaflet explains the treatment in detail, including preparation for treatment, the treatment process, and the risks and benefits involved. If you have any questions or concerns please speak to your consultant or one of the phototherapists.

## **Background**

Natural sunlight has been known to be beneficial in treating certain skin disorders for thousands of years. Phototherapy is a specialised treatment that is carefully regulated to ensure patient safety and has proven to be a very effective treatment for many skin diseases.

Ultraviolet (UVR) rays produced by the sun are used in phototherapy. Although they can't be seen they are an important part of sunlight and are grouped into different wavelengths: UVA and UVB.

UVA rays penetrate 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, doses of UV light are carefully calculated to minimise this risk.

There are other choices of phototherapy treatment and the choice of treatment depends on your skin condition and on discussion with your doctor about what would work best for you.

Treatment is provided by specially trained physiotherapists from the Physiotherapy Department at the Shard, part of HCA Healthcare.

### What is Ultraviolet B (UVB) radiation?

Narrowband UVB uses a specific wavelength of UVB (311 to 312 nm) for treating skin conditions. This wavelength is referred to as narrowband UVB or TL-01. Treatment lamps produce these special rays, which have anti-inflammatory effects on the skin.

Although these rays are present in natural sunlight, UVB treatment is usually more effective because harmful and ineffective sunlight rays are filtered out. In this way we also seek to minimise the risk of burning episodes.

Treatment options for your skin will have been discussed with you with your consultant. UVB is often recommended if you have tried ointments or creams without success but before trying tablet medication. UVB has been found to be particularly useful for many

different skin conditions, including psoriasis, eczema and vitiligo, and also to build up tolerance to natural ultraviolet light for people with light sensitive skin conditions. Most patients find their skin improves within about 30 treatments and remains clear for three to four months or sometimes longer. The number of treatments and successfulness of the treatment varies from one patient to another and from one skin disease to another.

## Assessment process (MED testing)

On your first visit you will have a pre-treatment assessment to determine the appropriate treatment protocol for you and assess the areas of skin that require treatment.

The phototherapist will then perform a Minimal Erythema Dose (MED) test. This involves the use of a hand held device which will deliver a number of doses of UVB to a small area of your skin. The result of this test will be read 24 hours later and will help decide what individual dose of light treatment you should be started at. This may also be important if you suspect you are unusually sensitive to sunlight or if you are taking medications that may make you extra sensitive.

You may feel a warm sensation during the test but there should be no pain. You will expect to have some patches of redness on your skin within 12-24 hours later, as per the photo below.



If you have an adverse reaction to this test, then your phototherapist may recommend you be referred back to your consultant. You should ring the physiotherapy department if this happens.

If the test is inconclusive then it may need to be repeated.

Even if you have had UVB treatment in the past an MED is normally required because your skin sensitivity to UVB can change. The MED makes sure you are

treated at a safe UVB dose, but also makes sure you are started at a high enough dose to have an effect.

If an MED cannot be done then the phototherapist may ask you about your history with sun exposure, for example whether you tan or burn and use this 'skin type' to determine your starting dose.

#### **Treatment process**

Following your test result, you will be able to commence treatment.

At each visit the phototherapist will examine your skin and ask you some questions before you enter the machine.

You will be provided with goggles to protect your eyes and a mask to cover your face if it does not require treatment. Men will need to wear genital protection such as a jockstrap/sock whilst receiving treatment.

The treatment involves standing in a cabinet containing fluorescent tubes that produce UVB rays. It will be discussed with you the correct position to stand in the machine to make sure that all your skin is exposed evenly each time.

Your starting dose of UVB may only be a few seconds and then this will gradually build up over the course of your treatment. The phototherapy staff will closely monitor the amount of UVB you receive and will increase the dose with each treatment as long as you have tolerated the previous treatment dose. Once the machine is on you may feel a warm sensation, but there should be no pain. Please let the phototherapist know if it feels uncomfortable.

Please allow up to 45 minutes for your initial assessment and 15 minutes for follow-up appointments. Your skin condition will determine the frequency of your visits, although treatments are generally given 2-3 times a week for 8-16 weeks.

Total length of a treatment course will depend on your response and the specific skin condition being treated.

# Practical advice for the day of your treatment

- Do not wear perfumes, deodorants, aftershave lotions or other cosmetic products as 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 treatment.
- For the same reason please let the phototherapist know if have started any new medications or creams during your treatment. Some medications, such as NSAID's (non-steroidal anti-inflammatories e.g. lbuprofen) and some antibiotics, can increase your sensitivity 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. You may wish to moisturise using a water-based moisturiser, which will help your skin to absorb the ultraviolet light. Please speak to your phototherapist for more information on this.
- Do not use oily creams as these could prevent the UVB from being absorbed or cause a sunburn reaction.
- Please take measures to reduce your exposure to the sun's rays to minimise the risk of sunburn. These include:
  - wearing a hat when possible
  - cover up with long sleeved clothes particularly on sunny days
  - apply sunscreen generously at least 20min before going outside
  - Choose a product with sun protection factor (SPF) of at least 50 with four or five star UVA rating (this makes sure you are protected against both UVA and UVB rays). Reapply sunscreen regularly, particularly after swimming or if sweating heavily and be particularly careful with your sun protection between 11am and 3pm
  - Please do not sunbathe or use sunbeds during the whole course of your treatment.
- Please inform us if any areas of your skin become newly exposed i.e new haircut / wax during the course of your treatment. If you wear clothing during treatment it is important that you wear the same clothing or the exact same style for every treatment.
- Male patients must wear genital protection while in the machine.
- If you are planning a pregnancy or think there is a chance you could become pregnant during the treatment, it is advised that you take the prepregnancy folic acid supplements.

#### **Appointments**

Please remember to keep your appointments and let us know if you cannot attend for any reason. If a treatment is missed, your dosage may be reduced.

You must allow 24 hours between treatments for your skin to settle. Attending regularly helps to achieve better results from your treatment.

Please be aware that due to our safeguarding policy, children under the age of 18 are not permitted to attend these appointments with you unless accompanied by another adult.

You will be able to book appointments in advance if you wish.

#### What are the risks?

Your consultant and phototherapist will discuss with you the possible complications of UVB treatment in greater detail, but you need to be aware of the following:

- Your skin can become itchy and dry. Regular use of moisturiser will help to minimise this.
- It is likely you will get a sunburn-like reaction (erythema) at least once during your course. This usually develops 8-12 hours after your treatment and usually settles within 24 hours. If you get any severe sunburn-like reactions then you should contact the physiotherapy department to speak to a phototherapist. If there is any delay in getting further advice you may use a steroid ointment if you have this at home, as well as moisturisers.
- You may get a spotty, itchy rash during your course (prickly heat or PLE): about one in ten people do.
- Depending on your natural skin colour, you may develop a dark tan if your skin does brown easily in sunlight.
- Cold sores. This may affect one in thirty people. Tell your phototherapist if you notice any early signs of tingling or painful bump developing on your lips. If you have a history of cold sores it may be advisable to apply sunblock to lips before each treatment.
- Deterioration of the disease being treated. This may occur instead of improvement and your doctor will advise you of the risks of this happening.

# Risks associated with multiple courses of phototherapy:

- Skin cancer. People who have a lot of sunlight exposure have an increased risk of cancer. Although we do not know the full risk of UVB, if we assume the risk is the same as with sunlight (approx. 1:10 in the UK), a course every year over the whole of a patient's life would in general double the risk of treatable skin cancer. Many factors affect this. If you are not having your face treated this risk is reduced.
- Photoaging. If you need many treatments it is possible you may develop sunlight induced skin changes with wrinkles and skin discolouration, similar to that of the ageing process or cigarette smoking.

If you decide to go ahead with this treatment you will be asked to sign a consent form.

If you have any other questions or thoughts and feelings about your skin condition, please speak to a phototherapist who will be more than happy to answer any questions. Alternatively, the list of websites below contains information about the process of

phototherapy, sunscreen protection and patient support groups.

http://www.skinhealthinfo.org.uk/sun-awareness/

https://www.nhs.uk/conditions/sunburn/

www.psoriasis-association.org.uk

www.eczema.org

www.nottinghameczema.org.uk

www.vitiligosupport.org.uk

www.vitiligosociety.org.uk

www.porphyris.org.uk

#### References

South East of England Phototherapy Networkhttp://www.phototherapysupport.net/

St Johns Institute for Dermatology http://www.guysandstthomas.nhs.uk/ourservices/dermatology/overview.aspx

British Association of dermatologists – Patient information leaflet – Produced March 2020

## **Important Contact Information**

Physiotherapy Department: 020 7234 2500

Website: www.londonbridgephysiotherapy.com

Main Website: www.hcahealthcare.co.uk

Email: lbh.physiotherapy@hcahealthcare.co.uk