

Having daylight photodynamic therapy to treat actinic keratoses.

Department of Dermatology

Information for Patients

Produced: September 2023

Updated: July 2024

Review: September 2026

Leaflet number: 1436 Version: 1.1

Introduction

This leaflet has information on what actinic keratoses are, what daylight photodynamic therapy is, what to expect during treatment and how to care for the area after treatment.

What are actinic keratoses?

Actinic keratoses are areas of sun-damaged skin. This damage is normally caused from sun exposure over many years. They normally develop on body parts which are regularly exposed to the sun, for example: the head, ears or forearms. They can vary in appearance. Actinic keratoses can feel rough, dry or scaly and be itchy or sore. The colour may be pink, red, or skin-coloured. They can grow to 1 to 2 centimeters in diameter and can be raised. The surrounding skin can also look sun-damaged. For this reason, when actinic keratoses are treated we also treat the surrounding area as well as the visible lesion(s).

You can treat actinic keratoses with regular use of sun cream and moisturiser. However, some lesions can be long lasting and need treatment. If actinic keratoses are left untreated for many years there is a small risk that they can develop into a form of skin cancer. This risk may prompt your doctor to ask for treatment for your actinic keratoses to reduce the risk.

What is daylight photodynamic therapy?

Daylight photodynamic therapy is used to treat sun-damaged skin, this includes actinic keratoses. A gel is put on the sun-damaged skin. It is called photosensitising gel. It works when exposed to natural daylight. Once activated, the gel targets and destroys abnormal or damaged cells on the skin. The gel only targets abnormal or damaged cells. The surrounding healthy cells will not be harmed. Sometimes the treatment must be repeated in a cycle to remove the lesions fully. The 'treatment area' is the area of skin which is exposed

**Health information and support is available at www.nhs.uk
or call 111 for non-emergency medical advice**

Visit www.leicestershospitals.nhs.uk for maps and information about visiting Leicester's Hospitals
To give feedback about this information sheet, contact InformationForPatients@uhl-tr.nhs.uk

to the sun and has the gel applied. The gel can cause swelling and a tingling feeling during treatment. After the swelling has settled, the area of actinic keratosis should be improved.

Daylight photodynamic therapy clinic only happens between March and October each year. This is called the treatment season.

Daylight photodynamic therapy is licensed for the treatment of actinic keratoses to the scalp and head. Your doctor may want you to have this treatment for a different body part or a different condition. This would make the treatment off-licence. Dermatology products are often used off-licence. If your treatment is off-licence, your doctor will explain how this is in your best interest for your diagnosis and it will be clear on your consent form. All off-licenced treatments are reviewed and approved by the lead consultant for photodynamic therapy.

What are the possible side effects of treatment?

You may have the following side effects:

- Redness to the treatment area is common.
- A build-up of scale or a scab to the treatment area is common and expected.
- You may feel a stinging or burning pain to the area where the gel has been applied, this is common.
- The pigment (colour) of the skin of the treatment area may change after treatment; it may become darker or lighter. This is uncommon.
- The treatment area may become infected. This means it could be red, swollen and painful. This is rare. If this does happen, you should contact your GP or attend urgent care.
- Daylight photodynamic therapy may not be effective, and there is a chance your condition will come back. If this happens, your doctor may offer you different treatment or another cycle of daylight photodynamic therapy.

What do I need to do before my appointment?

We advise patients to apply moisturiser once per day for 1 week before treatment. You can use Vaseline or petroleum jelly or a urea based moisturiser. You should apply it to the area of sun-damaged skin which your doctor has chosen to treat. This softens any scales or crust present before treatment.

We recommend you have a brand new pot of Vaseline or petroleum jelly for use **after** your treatment to avoid the risk of infection.

What to expect on the day of treatment

On the day of treatment you should expect the following to happen:

- A member of the team will explain the treatment and check that you understand and consent to it.
- You will have your blood pressure checked.

- We will give you a chemical sunscreen. It needs to be put on to all exposed areas of your skin. This includes the treated area and any other skin which is not covered by your clothes. We do not use a physical sunblock as it interferes with the reaction of the gel. The sunscreen takes 10 minutes to dry. Try to wear clothes that expose the treatment area, for example if you are having your arms treated wear a t-shirt.
- The treated area will be cleaned with an alcohol wipe.
- The crusts or scales on the treatment area will be gently removed.
- The photosensitizing gel will be applied in a thin layer to the treatment area and the surrounding 5 millimetres of skin. This means the visible and non-visible areas of sun-damage is treated.
- You must then go outside within the next 30 minutes and stay in the daylight for the next 2 hours. You do not have to sit in the full sun, only the daylight. You can take shelter in the shade if you get too hot.
- If the 2 hours outside is interrupted (for example, to go to the toilet), you must time the interruption and add this time on at the end. You must be in daylight for a total of 2 hours, if this time is not met the treatment may not work as well.
- We prefer that you stay on hospital grounds during treatment. This is so we can check you for any side effects. You are welcome to bring activities to do during treatment.
- The nurse will tell you the time that you need to come inside and have the gel removed.
- During treatment you may feel some tingling in the treatment area but do not worry. This is a common during the treatment.
- After 2 hours the gel will be removed. The treatment area must be covered. If you stay at hospital during your treatment, we will take your blood pressure again.
- You must avoid sun exposure to the treatment area for the next 48 hours. You can either keep the area covered with a dressing or a piece of clean clothing.

Aftercare for the treatment area

You should always wash your hands before touching the treated area to prevent infection.

For the first 48 hours

- You must protect the treated area from the sun. You can do this with sunblock (at least SPF30) or by wearing protective clothing.
- You may have some swelling, redness, tenderness or stinging around the treatment area for a few days after treatment. This should reduce after a few days. If needed, you can take pain relief that suits you, for example, paracetamol.

After 48 hours

- You can wash the treated area as normal. You should not rub the area whilst washing or drying. You should gently dab the area when washing and drying.
- You can use mild cleansers and non-perfumed moisturisers for on the treated area if you want to. If you want to use Vaseline, moisturiser or cleanser, it must be from a new and clean bottle.

This prevents cross contamination and infection.

- A scab or crust may form on the treated area. This is normal so do not be alarmed. Healing happens under the scab or crust so do not disturb or remove it. The scab will fall off naturally when the treated area underneath has healed. This can take up to 10 days.

After treatment

You should start a plan of sun protection after treatment and long term. This can include:

- avoiding the sun
- wearing protective clothing,
- using sunscreen to exposed skin in hot weather (SPF30 plus)

This is to prevent the skin from getting further sun damage.

You may have a follow up appointment 3 months after treatment, either with the doctor or the nurse.

This is to review the outcome of the daylight photodynamic therapy and see if you need more treatment. If you do need another cycle of treatment, this has to be at least 3 months after your first treatment. If there is enough time left in the treatment season, you may be able to have another cycle in the same year. If there is not enough time left, you will wait until the next season or be offered a different treatment.

More information

You can read more information from the British Association of Dermatology and DermNet which are trusted websites.

<https://cdn.bad.org.uk/uploads/2021/12/09140231/Photodynamic-therapy-PIL-January-2023.pdf>

<http://dermnetnz.org/procedures/photodynamic-therapy.html>

Contact details

St Peter's Health Centre 0116 258 5221

Melton Mowbray Hospital 01664 800 106

Loughborough Hospital 01509 564 376

Hinckley District Hospital 01455 441 918

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔
على هذه المعلومات بلغةٍ أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل
જો તમને અન્ય ભાષામાં આ માહિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਹੇਠਾਂ ਦਿੱਤੇ ਗਏ ਨੰਬਰ 'ਤੇ ਟੈਲੀਫੋਨ ਕਰੋ।

Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

Previous reference:

If you would like this information in another language or format such as EasyRead or Braille, please telephone 0116 250 2959 or email equality@uhl-tr.nhs.uk