

# RADIOTHERAPY FOR SKIN CANCER

## WHAT ARE THE AIMS OF THIS LEAFLET?

This leaflet has been written to help you understand more about radiotherapy treatment for skin cancer.

## WHAT IS RADIOTHERAPY?

Radiotherapy is the use of X-rays and other forms of radiation to destroy cancerous cells, while causing as little harm as possible to normal cells. In the skin, it is mainly used to treat [basal cell carcinomas](#) and [squamous cell carcinomas](#), although other skin cancers or benign skin conditions may also benefit from radiotherapy.

## WHEN IS RADIOTHERAPY USED?

Radiotherapy is particularly useful in cases where surgery might be difficult or disfiguring, for example:

- on the face, near the nose, ear, or lip, or when the cancer is large or
- deep within the skin.

Radiotherapy may be considered if a patient is not fit for surgery or does not want surgery. It may also be used after surgery to reduce the risk of the cancer coming back.

In certain cases, radiotherapy is used to shrink the tumour, treat cancer that has spread to other sites or to relieve symptoms caused by the cancer rather than to cure it (palliation).

## WHAT TYPES OF RADIOTHERAPY ARE THERE?

There are different types of radiotherapy used in the treatment of skin cancer and your radiotherapy doctor will explain which

type is the most suitable for you. These include:

- Superficial or orthovoltage radiotherapy uses X-rays that do not travel deep into the skin.
- Electron radiotherapy uses electron beams that can travel deeper.
- Brachytherapy involves placing some radioactive material onto or into the skin.
- Photon radiotherapy may be used, such as to treat lymph nodes or to help with symptom control.

## WHERE WILL YOU RECEIVE THE TREATMENT?

Radiotherapy for skin cancer is given as an outpatient procedure in a radiotherapy department. Generally, you will not need to be admitted to hospital.

## WHAT IS THE DURATION OF THE TREATMENT?

The radiation dose, frequency of treatment and the number of days over which it is given can vary between patients. Your doctor will advise you on how long your treatment will last.

Skin radiotherapy is usually delivered daily from Monday to Friday.

For very small cancers, the treatment can be delivered within one or few visits. For larger cancers, it may be over a period of 2 to 4 weeks, or very rarely 6 weeks.

## PLANNING YOUR TREATMENT

Your radiotherapy doctor will mark the cancer on the skin with a marker pen. The marked area is usually slightly bigger than

visible cancer. A special shield, called lead cut-out, may be used to shape the radiotherapy beam and protect the surrounding skin. If the area to be treated is large or complex, it may be necessary to make a plastic mesh mask to help keep your treated body part from moving. The staff who are looking after you will explain this in more detail as needed.

Sometimes scans may be used to identify the exact area to be treated. The ink marks may also be used to line up the radiotherapy machine each time you are treated to ensure you will be in exactly the same position.

## HAVING YOUR TREATMENT

At the beginning of your treatment, you should be given a written information leaflet on how to care for yourself during radiotherapy. The actual treatment only takes a few minutes.

The treatment will usually be given by a therapeutic radiographer. Therapeutic radiographers are experts specially trained in giving radiotherapy treatment.

The radiographer will position you on a couch and make sure that you are comfortable; it is important that you lie very still during the treatment. If the skin cancer is near your eye, nose, ear or teeth, a small lead shield may be applied during treatment to protect these areas from the radiation. You will be left alone in the treatment room while you have your treatment, but the radiographer will be able to hear and see you.

You will not be able to see or feel the radiation and it is not painful. The treatment machine will produce buzzing sounds during radiation, which is normal.

## ARE THERE ANY SIDE EFFECTS?

Radiotherapy for skin cancer only affects the area treated with radiation. The radiation does not stay in your body after treatment, and it is safe to mix with other

treatments. Any side effects that you experience will be monitored regularly by your medical team.

During or after your course of radiotherapy, you may notice increased redness, soreness, itching, peeling and repeated scabbing around the treatment area, which may take several weeks to heal (typically up to 2-3 months). If your treatment is short, for example one or few doses, skin side effects may happen after you have finished your treatment, sometimes within a week or two. Occasionally, there may be some bleeding in the treated site.

Late side effects, which develop months or years after treatment may occur where the treated area develops small spidery blood vessels or appears paler than the surrounding skin.

It is common to experience permanent hair loss, but only in the area that was treated with radiation.

In rare occasions, an ulcer in the treated area may form that will require long-term dressing or a small operation to remove it.

Radiation can change how pacemakers or implantable cardioverter-defibrillators (ICD) work, so please let your medical team know if you have one.

Radiation can be harmful to the unborn child; therefore, it is important to let your doctor know if you suspect that you might be pregnant.

## HOW SHOULD YOU LOOK AFTER YOUR SKIN?

- Keep the treated area dry. Wash gently with mild, fragrance-free soap and lukewarm or cool water. Pat the skin dry with a towel.
- If the beard area is treated, avoid wet shaving – use an electric razor instead.



- You may use moisturisers, ointments, lotions, cosmetics and sunscreen but only after any treatment reaction has settled and if the skin is not weeping.
- Avoid sticking plasters on the treated area. If the skin is bleeding, weeping, or appears damaged, cover it with a non-adhesive foam dressing suitable for wet wounds. Your healthcare team or pharmacist can provide guidance.
- If you are having treatment on your scalp or near the hair line, wash hair with mild shampoo and allow your hair to dry naturally. Do not use a hair dryer near the area.
- Protect the treated area from strong winds and sunlight, as these can worsen irritation. Try to prevent clothing from rubbing against it.
- If you notice signs of infection – such as pain, greenish-yellow discharge, or worsening discomfort – consult your healthcare team or GP.

## WHERE CAN I GET MORE INFORMATION ABOUT RADIOTHERAPY?

### *Patient support groups providing information:*

Independent Cancer Patients' Voice (ICPV)  
[www.independentcancerpatientsvoice.org.uk/](http://www.independentcancerpatientsvoice.org.uk/)

### *Weblinks to other relevant sources:*

NHS  
[www.nhs.uk/conditions/non-melanoma-skin-cancer/](http://www.nhs.uk/conditions/non-melanoma-skin-cancer/)  
[www.nhs.uk/conditions/radiotherapy/](http://www.nhs.uk/conditions/radiotherapy/)

Cancer Research UK  
[www.cancerresearchuk.org/about-cancer](http://www.cancerresearchuk.org/about-cancer)

Macmillan Cancer Support

[www.macmillan.org.uk](http://www.macmillan.org.uk)

A practical guide to understanding cancer:

Understanding skin cancer

[www.macmillan.org.uk/cancer-information-and-support/stories-and-media/booklets/understanding-skin-cancer](http://www.macmillan.org.uk/cancer-information-and-support/stories-and-media/booklets/understanding-skin-cancer)

Jargon Buster:

[www.skinhealthinfo.org.uk/support-resources/jargon-buster/](http://www.skinhealthinfo.org.uk/support-resources/jargon-buster/)

This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: individual patient circumstances may differ, which might alter both the advice and course of therapy given to you by your doctor.

*This leaflet has been assessed for readability by the British Association of Dermatologists' Patient Information Lay Review Panel*

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