



Patient Information for Radiotherapy for keloid scars



This leaflet is for patients receiving radiotherapy following surgical removal of a keloid scar. It describes:

- What is Radiotherapy?
- What will happen during your radiotherapy planning and treatment.
- The effects that you may experience during and after treatment, and how best to cope with them.

Your doctor and radiographer will explain specific aspects of your treatment. If you have any questions or concerns, please ask.

What is Radiotherapy?

Radiotherapy for keloid scars uses carefully measured doses of radiation to target the site of the scar. It damages the cells and stops them growing and forming excessive scar tissue.

How many treatments will I need?

Usually one treatment is given within 24-72 hours of your surgery to remove your keloid scar.

Planning your radiotherapy treatment

Before your surgery, you will visit the radiotherapy department to allow your doctor and radiographer to carefully plan your treatment. Your doctor will use a felt tip pen to mark the area to be treated on your skin. Some measurements are taken and with your permission, some photographs as well. This helps your radiographers to treat the exact area when you return for your treatment.

Sometimes we need to use equipment to either help you to stay still during treatment, or to protect areas your doctor doesn't want to treat. These are described below, but your doctor will also explain them to you. They are made personally for you at your planning appointment if required.

Lead shield: Your doctor might want to use a thin piece of lead to protect the area around your scar. If this is needed, our specialist mould room staff will come and make a tracing of the shape the doctor has drawn on your skin. They will then use this tracing to make a lead shield which will be placed on your skin during your treatment. It is not heavy or uncomfortable.

Picture 1: Lead shield



If your scar is on your face or neck, it might be necessary for the mould room staff to make a mask for your treatment. This can either be a lead mask or plastic mask. Your doctor will discuss this with you in clinic before your planning appointment.

Radiotherapy treatment

There are two types of radiotherapy treatment for keloid scars, both are explained below. Both of these treatments are superficial treatments. This means that the radiation does not travel far into your skin before it is absorbed.

Your doctor will decide which is best for you and discuss this with you.

Type 1-Superficial low dose X-rays

If you are having your treatment on the superficial X-ray unit, it will be on your appointment list as 'Superficial'. It is quite a small machine with an applicator attached, which comes in contact with your skin. It only lightly touches you and isn't painful. If you had a lead mask/shield made, your radiographers will put it on at this appointment.

Your radiographers will help you into the correct position for you treatment. When they are happy, they will leave the treatment room to switch the machine on. They are watching you all the time on CCTV cameras. You won't see or feel anything.

Your appointment on this machine can last up to 20 minutes. Most of this time is getting you into the correct position. The actual treatment itself lasts about 5-10 minutes.

Type 2- Electrons

If you are having your treatment using electrons, it will be on your appointment list as one of our treatment rooms. The type of machine used for electron treatments is a linear accelerator. It is quite a large machine with an applicator attached to the end. The machine will not touch you, but will come quite close.

Your radiographers will help you into the correct position for you treatment. When they are happy, they will leave the treatment room to switch the machine on. They are watching you all the time on CCTV cameras. You won't see or feel anything.

Your appointment on this machine lasts about 10 minutes. Most of this time is getting you into the correct position. The actual treatment itself lasts a couple of minutes.

What are the side effects of treatment?

Radiotherapy only affects the skin in the area being treated. You may notice your skin becoming pink or red. It may also be dry, flaky, itchy and a little sore. This will gradually get better over the next 6 weeks following treatment.

Where washing is permitted, you should wash your skin with lukewarm water and your normal soap. Pat your skin dry with a soft towel. You should continue with these instructions until any skin reaction has settled.

In the long term, the area of skin treated may become a little discoloured- darker or lighter than before. This area of skin will also be more sensitive to the sun. We therefore advise you use sunscreen with both UVA/UVB protection and minimum SPF 50.

Radiotherapy can delay the healing process. It may therefore take longer than usual for your scar to heal.

A very rare but potential effect is that radiation can cause tumours. Although this is a serious possible risk of your radiotherapy, it is important to bear in mind that the effect is very rare. If it does happen it is likely to be many years after treatment.

What happens when my radiotherapy treatment has finished?

You will be followed up by your plastic surgery team.

If you have any concerns about your scar, please contact your plastic surgery team, your skin care nurse or your GP.

Specialist Nurse **T** 0141 301 7613

Notes		

Notes			

Leaflet written by H. Reid, S. Melvin and D.M. Ritchie July 2019 Leaflet reviewed by N. Sidek and B. McCann November 2023 Leaflet QA approved by H. Reid November 2023

Review date: November 2025