

Information for Patients

Radiotherapy for Soft Tissue Sarcomas of the Limbs

The Beatson West of Scotland Cancer Centre
1053 Great Western Road,
Glasgow G12 0YN

This leaflet is for patients receiving radiotherapy to a limb (arm or leg) for a soft tissue sarcoma. It describes your radiotherapy planning and treatment. It also explains the effects that you may experience during and after treatment, and how best to cope with them. We treat each patient as an individual and the effects of treatment may vary from one patient to another. Your doctor, radiographer, and clinical nurse specialist will explain specific aspects of your treatment.

What is Radiotherapy?

Radiotherapy is the use of carefully measured doses of radiation to treat cancer. It is a treatment that is painless. It damages the cells and stops them dividing and growing, therefore minimising the chances of your cancer coming back in the same place. This is what your doctor will call 'local control' of disease.

Radiotherapy is often given after you have your surgery. It is usually started within 12 weeks of you having your operation. However, there might be cases where radiotherapy can be given before the surgery, aiming to control or shrink the tumour. This would help the surgeon to operate successfully, or to avoid having to amputate the limb.

Do I need any visits to the radiotherapy department before I start my radiotherapy?

Radiotherapy treatment is a very accurate treatment. It is planned individually for you. You will visit the radiotherapy department several times before you start your treatment. The following steps are needed:

Step 1: Mould Room Visit

- In order to ensure accuracy and reproducibility we need to make a special plastic mould of the area we need to treat. This mould is called a sarcoma board.

- We will make your sarcoma board in the mould room. It is a plastic board with some moulds and plastic supporting straps, made to fit comfortably around your limb. It will be made specifically for you and it will be used for your scan and each day you attend for treatment. You will have two visits to the Mould Room to ensure you are correctly positioned.



Picture 1: Sarcoma Board

Step 2: CT Scanner visit

To help plan your treatment you will have a CT scan of the area that needs to be treated. Your radiographers will ask you to lie on the CT couch. They will help to position you on your sarcoma board. They will place small markers on your skin. Sometimes they will also place wire over your scar to help with the planning. When the scan is finished, your radiographers may replace the small markers with tattoos that look like tiny freckles. These tattoos along with markers on your sarcoma board will be used to ensure you are in the correct position each day for treatment.

Sometimes it may be necessary to treat part of the groin area. The treatment is always carefully planned to only treat the area where the tumour was. This can cause a little difficulty for male patients, as we need to avoid treating the genital area wherever

possible, so we may ask you to move your genitalia (testicles and penis) away from the treatment area. We will ask you to place your genitalia into a special sling. You will be able to do this whilst covered so there is no need for you to be exposed. We would advise that you wear a loose fitting pair of underpants.

Treatment

You will have your radiotherapy treatment at the Beatson West of Scotland Cancer Centre, in the radiotherapy department. Treatment is daily Monday to Friday.

The machine that delivers your radiotherapy is called a linear accelerator. Your radiographers will explain the procedure to you and answer any questions you may have.

For each treatment, you will lie on the couch just as you did in the CT Simulator. The radiographers will move the machine and the couch into the correct position. They will then leave the room for a few minutes to switch the machine on. Your radiographers will be watching you all the time on a television screen. The whole procedure only takes about 10 minutes. There is nothing to feel during treatment or immediately afterwards.

Please check with your radiographers if you have any questions or problems. You will see the doctor or clinical nurse specialist once a week while you are having treatment. This is to check how you are coping with the radiotherapy and answer any questions you may have.

Side-effects of radiotherapy

The side effects of radiotherapy are divided into early (acute) and late (chronic).

The **early side effects** are those that occur during your treatment and a couple of weeks following completion. The most common effects are:

- **Tiredness**
- **Hair loss (temporary or permanent):** you will only lose hair in the area being treated. You may find that you start losing hair in the area treated 2-3 weeks into treatment.
- **Skin reaction (in the area we treat):** your skin may become pink, itchy, dry or sore. Any skin reaction is likely to become worse in the 10-14 days after you finish your treatment.

To try to help minimise your reaction, bath and shower while having treatment but don't have the water too hot. You can continue to use your normal soap, however if your skin becomes red or itchy, use a mild soap instead.

You should avoid sun exposure to the treated area while on treatment. When your treatment has finished and any skin reaction has settled, you should use a sunscreen with UVA/UVB protection minimum SPF 30.

- **Limb Swelling:** you may experience some swelling of the limb treated with radiotherapy, as a result to the inflammation caused by the treatment. This is a normal reaction to the radiotherapy. The swelling usually settles after you finish your treatment, however in a few patients this may persist.
- **Joint Stiffness:** you may experience stiffness in your limb. The **late side effects** of radiotherapy can occur months or years after radiotherapy has finished. The side effects depend on the area treated. These late side effects are the hardest to predict and, unfortunately, when they do occur they are permanent.

Your radiotherapy doctor will have explained the potential late side-effects of radiotherapy to you as part of the consent process.

The effects may include:

- **Lymphoedema (swelling of the limb):** the limb below the level of surgery might develop swelling months or years after you finish your treatment. If you are overweight or your work requires prolonged standing you are more likely to develop swelling. Speak to your Doctor if you are concerned. You may be referred to a lymphoedema specialist.
- **Fracture:** radiotherapy carries a small risk of making the bone treated more likely to fracture.
- **Fibrosis:** radiotherapy is associated with long – term scarring (fibrosis) of the area treated. This is due to thickening of the muscles and tissues within the treated area. Good skin care, usage of water – based moisturisers, avoidance of sun exposure and stretching/exercising can help in minimising these side effects.
- **Second cancer:** when having radiotherapy there is a small risk of developing a new cancer in the area that was treated. This could happen many years after you finish your treatment and the likelihood of it is very small. Please discuss it with the medical team if you have concerns.

What happens after I finish my radiotherapy treatment?

Your Doctor will send you for a chest x-ray soon after your treatment has finished. You will be given an outpatient appointment for 6 to 8 weeks after the end of your treatment.

You will then be followed up with surveillance MRI scans. You will have your first scan 6 months after you finish your radiotherapy. Regular chest X-rays are also arranged, usually on the day you attend clinic.

Where can I get help?

All our staff are here to make sure your treatment goes as smoothly as possible and will try to help with any questions or problems you may have. Further specialist help is available from:

Radiotherapy Team:

- Dr Fiona Cowie, Consultant Clinical Oncologist
- Dr Ioanna Nixon, Consultant clinical Oncologist
- **Sarcoma Nurse Specialist (Beatson)** Tel: 0141 301 7262
- **Information/support Radiographer (Beatson)**
Tel: 0141 301 7427
- **Macmillan Information Radiographer and Counsellor (Beatson)** Tel: 0141 301 7423
- **Radiotherapy Advice Line (Beatson)** Tel: 0141 301 7432, this is run by experienced radiographers and is an answer phone service.

The Cancer Centre also has a **Cancer Treatment Helpline** for urgent calls. This is for patients on or within 6 weeks of treatment who have urgent or severe symptoms such as -

- Shivering or flu-like symptoms.
- Temperature greater than 37.5°C.
- Gum/nose bleeds or unusual bruising.
- Worsening or sudden breathlessness.
- Leg weakness/difficulty walking.
- Severe nausea/vomiting/diarrhoea/constipation.
- Sudden increases or uncontrolled pain.
- Other concerning symptoms associated with your cancer treatment.

The line is available 24 hours for emergencies, although it would be helpful if you called early in the day if this is at all possible.

For Urgent Calls:

Beatson 8am-8pm Tel: 0141 301 7990

National 8pm-8am Tel: 0800 917 7711

Counselling and Clinical Psychology

Within the Cancer Centre there is a counselling and clinical psychology service that may be able to help with worries and difficulties you might be having before, during or after treatment. If you think this may be helpful, please ask staff to put you in touch.

Other organisations providing support and information

- **Scottish Sarcoma Website: www.ssn.uk**
- **Beatson Cancer Centre** to find out more about our Centre please visit **www.beatson.scot.nhs.uk**
- **Macmillan Cancer Support: 0808 808 0000**
www.macmillan.org.uk
Providing practical, medical, emotional and financial advice for those affected by cancer.
- **Cancer Support Scotland - (Tak Tent), The Calman Centre, Gartnavel Complex. Freephone 0800 652 4531 or 0141 337 8199.**
Provides emotional and practical support on a one-to-one basis and through community based groups.
Complementary therapies and counselling available.
www.cancersupportscotland.org

- **Clic sargent cancer care for children:**
Emotional support, practical and financial help and holidays for children and young people (under 21 yrs)
www.clicsargent.org.uk
Telephone 0300 330 0803
- **Disabled Living Foundation:** 0300 999 0004
www.dlf.org.uk
- **Limbless Association:** 0800 644 0186
Information and advice for people of all ages with amputations.
www.limbless-association.org
- **Maggie's Gartnavel:** 0141 357 2269
- **Maggie's Lanarkshire, Monklands Hospital:** 01236 771199
- **Maggie's Forth Valley:** 01324 868069
Maggie's Centre provides a comprehensive cancer support programme for people and their families affected by cancer.
- **Macmillan Benefits Team (within the Beatson):**
0141 301 7374
Offers free and confidential benefits advice for people affected by cancer and their carers
- **Sarcoma UK 0808 801 0401**
www.sarcoma.org.uk
info@sarcoma.org.uk
- **NHS 24: 111**

Notes

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