

elbow, can make it stiff by causing hardening of tissues. Regular exercise and using the joint as normal will help to stop it from stiffening up.

### **Second malignancy**

Radiotherapy is associated with a small risk of causing a second cancer many years later.

### **After treatment**

After your treatment has finished you will be asked to return to the Outpatient Clinic to be reviewed by your oncology consultant or his/ her team.

Radiotherapy takes time to work and so it is at this appointment your doctor will assess and discuss your progress and any continuing side effects with you and plan further appointments, needed in the future.

### **MISSION STATEMENT**

To act as a model institution to alleviate the suffering of patients with cancer through the application of modern methods of curative and palliative therapy irrespective of their ability to pay, the education of health care professionals and the public and perform research into the causes and treatment of cancer.

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# Radiotherapy to Limb



Revenue from these services is spent on the treatment of poor cancer patients.



**Shaukat Khanum**  
Memorial Cancer Hospital  
and Research Centre

Information for Patients

## Introduction

This leaflet is for people who have been recommended for treatment with radiotherapy to a limb. It is intended as a guide because the timing and effects of treatment may vary from one person to another. This leaflet will highlight the key points of the discussions you will have had with your doctor and treatment team. Family members and friends may also find it helpful.

## Treatment plan

The timing of the radiotherapy in your treatment plan may depend on your individual situation.

## Radiotherapy before surgery

Your doctors may suggest you have radiotherapy before surgery. It can shrink the sarcoma and make it easier to remove. You may then be able to have a smaller operation. It may also reduce the risk of the cancer coming back in the future by killing off any cells in the area that may have broken away from the main tumour. You will usually have daily treatments as an outpatient for five weeks. This is called **neoadjuvant radiotherapy**.

## Radiotherapy after surgery

Radiotherapy is often used after surgery to kill off any sarcoma cells that may have been left behind. You will usually have daily treatments as an outpatient for six weeks. The treatment will not begin until your wound has completely healed. Radiotherapy given sooner would slow down the healing process. This is called **adjuvant radiotherapy**.

## Radiotherapy for advanced sarcomas

If your cancer has spread or come back after it was first treated, it may not be possible to get rid of it completely. But it may be possible to control the growth of the cancer for a while with radiotherapy and sometimes chemotherapy.

A growing cancer can cause symptoms by pressing on nerves and other body tissues. Radiotherapy can relieve these symptoms by shrinking the tumour and so reduce the pressure. This is called **palliative** radiotherapy and you may just have a few treatments.

## Side effects

Radiotherapy treatment is painless. However, there are some side effects which are associated with radiotherapy and you may notice one or more of them gradually developing over the course of treatment.

**Please note that it is rare for one patient to experience all of these side effects.**

If anything is worrying you, however small, **during** your treatment, please tell your doctor either at your visit or by phoning the department.

## Tiredness

You may feel tired especially toward the end of a course of treatment. The tiredness wears off over a few weeks once the treatment ends.

## Skin reaction

Most people develop a skin reaction in the area being treated. The area may become red, more dry, sensitive or begin to peel. It is usual for the skin reaction to begin two to three weeks after the beginning of a radiotherapy course. It will last for a small number of weeks after radiotherapy is complete.

## Hair loss

This happens **only** in the area treated – for example, leg hair if your leg is being treated. The hair may grow back. If it does then it can take up to a year and it may be patchy.

## Swelling of the limb

This may happen during the treatment. This is normal and often settles after treatment finishes, although rarely may carry on. This may be improved by gentle exercise and remaining active during treatment.

## Stiffness

You may experience stiffness due to the radiotherapy causing slight swelling. This may be improved by gentle exercise and remaining active during treatment.

Usually the side effects which you have experienced may become worse for a short while and slowly settle over a few weeks. Please do not worry as this is quite normal. During this time you should continue to follow the advice you have been given during your treatment. Continue to take any prescribed medication for the side effects until they settle down.

## Possible long term side effects

Long term side effects can occur many months to years after radiotherapy has finished. These late side effects are hard to predict and unfortunately, if they do occur, can be permanent. We plan the treatment to avoid the surrounding areas around the tumour as much as possible to reduce these side effects.

## Swelling of the limb (lymphoedema):

The radiotherapy damages the small tubes that circulate tissue fluid around the body (the lymphatic vessels). Fluid builds up behind the blockage and causes swelling in the tissues close to where the radiotherapy was given – known as lymphoedema. Lymphoedema can't be cured, but the earlier it is diagnosed, the easier it is to control. Regular walking should help to reduce it and you will need to be careful not to injure the area. If you do get swelling in your hand or foot after radiotherapy to that limb, tell your oncology consultant. You may be referred to our lymphoedema team for advice and treatment.

## Fracture

There is a small risk that the bone in the treated limb may fracture. If necessary your bone could be pinned to prevent or treat a break.

## Thickening of muscle (fibrosis)

The muscle in the area that has been treated can become thickened. Regular stretching and moisturising of the area can reduce this affect.

## Stiff joints

Radiotherapy treatment to a joint, such as a knee or