An introduction to radiotherapy to the breast

Information for patients
This leaflet is designed to give you a brief introduction to radiotherapy to the breast.

The information given below is to help reduce any concerns you may have and decide about future treatment choices.

**What is radiotherapy?**

Radiotherapy is a local treatment which uses high energy X-rays, to kill any cancer cells that might be left behind after surgery. This reduces the chances of breast cancer returning in the areas that are treated. Although normal (non-cancerous) cells are also affected, unlike cancer cells they can repair themselves so are able to recover.

When you are having your radiotherapy you do not feel anything and it does not make you radioactive. It is perfectly safe for you to be with other people, including children and pregnant women, throughout your treatment.

Your course of treatment will last 3-4 weeks and is given on week days as an outpatient treatment at Leeds Cancer Centre, Bexley Wing, St James’s Hospital, Leeds, LS9 7TF.

You will have your radiotherapy on a machine called a Linear Accelerator, shown in the photograph opposite.

Each treatment takes around fifteen minutes.
**When is radiotherapy needed?**

You will usually be offered radiotherapy after breast conserving surgery or a lumpectomy.

If you choose to have a mastectomy (removal of the whole breast), radiotherapy is usually not required. If your pathology results after your mastectomy suggest a greater risk of local recurrence, radiotherapy may be recommended to reduce this risk.

This will be discussed on an individual basis.

**How does radiotherapy help?**

- Sometimes even after complete removal of a cancer from the breast, it can return in the same area. This is called ‘local recurrence’ and radiotherapy can reduce the risk of this happening.
- Giving radiotherapy to the remaining breast tissue after lumpectomy makes the treatment as effective as mastectomy.
- In some cases, giving radiotherapy after mastectomy can help the patient to live longer.

**What are the side-effects of radiotherapy?**

Generally, the side-effects of radiotherapy can be divided into two groups, early and late effects.

**Early side-effects:** This happens during or immediately after radiotherapy. During radiotherapy the skin in the treated area of your breast may become itchy and pink. These problems are usually mild and resolve after a few weeks.

You may also feel more tired than usual and this could last for a few weeks after treatment is finished.
Late side effects: Side effects in the months and years following radiotherapy are much less common.

After lumpectomy and radiotherapy the treated breast may become smaller and firmer. Some women can experience discomfort in the treated area, but this is usually not severe.

A small area of the lung next to the treated breast will receive some radiation which causes scarring of this area, but it is very unlikely to have any effect on breathing.

Radiotherapy to the heart (when the left breast is being treated) can increase long term risk of heart disease. With modern techniques the dose delivered to the heart is minimised, making the long term risk low.

Exposure to radiotherapy can slightly increase the risk of other cancers developing in the area treated in the decades following radiotherapy. This risk is very low.

Your specialist team will only recommend radiotherapy when the benefits of treatment outweigh any associated risks for you as an individual.

Who will tell me more about radiotherapy?

If you need to have radiotherapy following surgery you will see an oncologist who will discuss this in greater detail with you.

In the meantime, if you have any questions about including radiotherapy in your treatment plan please ask to see an oncologist before your surgery.