

# Radiotherapy to the chest wall

## Information for patients

The aim of this leaflet is to provide you with information about the use of external beam radiotherapy to the chest wall in treating breast cancer, including details of when it is given and the side effects that you may experience.

While we refer to 'women' in the text, most of the information also applies to men who have been diagnosed with breast cancer.

Although you may have heard about radiotherapy from other patients it is important to remember that their experience may not be the same as yours. If you have any questions please let us know. We are here to help and are happy to talk through any concerns.

## What is radiotherapy?

Radiotherapy uses precise, carefully measured doses of high energy x-rays to destroy any cancer cells left behind in the breast area after surgery. Cancer cells are more sensitive to radiation than normal cells. The x-rays either destroy the cancer cells or stop them from growing. It is given to reduce the risk of the cancer returning in the breast.

Radiation also damages normal cells in or around the area being treated causing side effects, but these will usually recover and heal. The aim of treatment is to destroy the cancer cells while minimising the dose given to the healthy cells as much as possible.

External beam radiotherapy does not make you radioactive, and it is perfectly safe for you to be around other people, including children, after your treatment.

The specialist team looking after you will help you to understand the treatment and answer any questions you may have. If you have any concerns, do not hesitate to speak to a member of your healthcare team, however insignificant it may seem.

## Using external beam radiotherapy to treat breast cancer

Radiotherapy is normally used to treat the whole chest wall area.

You will need to attend the radiotherapy department as an out-patient for a course of daily treatments (Monday to Friday). This is usually over a period of three to four weeks, but this can vary.

Each appointment will take around 15-30 minutes (although your hospital visit may be longer).

## Preparing for your treatment

It is important that your surgical wound has fully healed or any build-up of fluid (seroma) in the area has settled before treatment is started.

You will need to raise your arms above your head during your treatment sessions – for this reason it is really important that you have regained movement in your arm after surgery and are able to comfortably raise your arms above your head.

After surgery, it can be difficult or painful to lift your arm above your head and keep it there for the duration of the treatment session. If this is the case, talk to your breast care nurse or radiotherapy review specialist, who may arrange for you to see a physiotherapist. You may also take some pain relief before your treatment appointments to ease any discomfort.

Before starting your treatment we need to tailor it to your specific needs. You will need to attend the radiotherapy department for a planning scan. This is done using a CT scanner, which takes x-rays of the area to be treated.

You will be asked to undress above the waist and will be given a gown to wear. It may be helpful for you to wear a top that is easy to take off and put on.

We will ask you to lie down on the couch of the machine and raise your arms above your head – you will be supported by a special piece of equipment designed specifically for this purpose. For this reason it is important that you have regained your arm movement following surgery and are able to comfortably raise your arms above your head before you start.

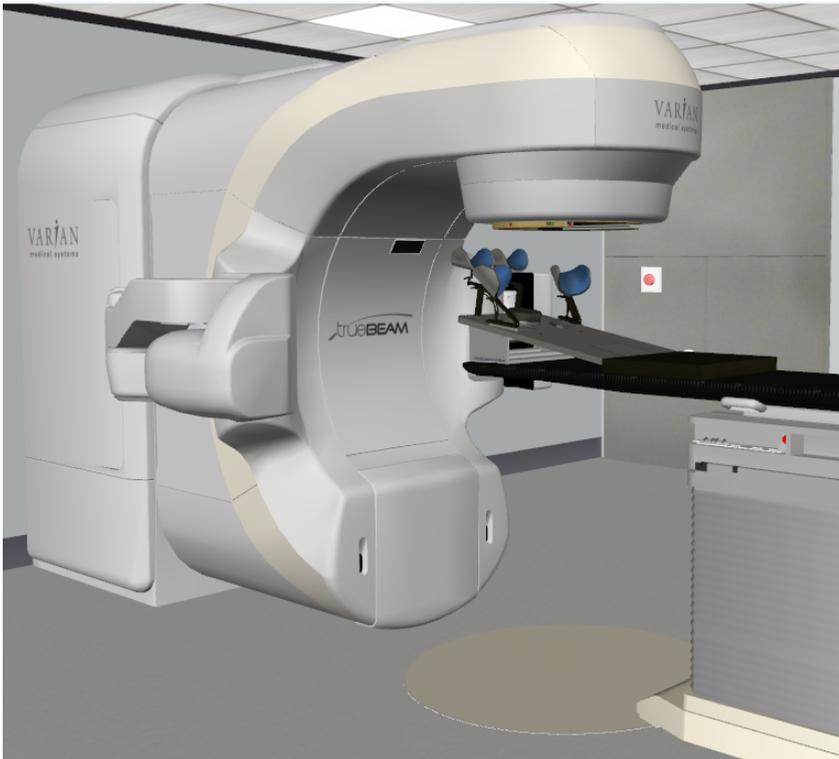
Treatment planning is a very important part of radiotherapy. Marks will be drawn on your skin by the radiographer. They will also stick markers on your skin that are visible on the CT scan to help the doctor when planning your treatment. At the end of the CT scan, three permanent ink markings will be made on your skin using a pinprick of ink. These are used to make sure that you are accurately positioned for your treatment each day.

## **Treatment**

Treatment will usually start a few weeks after your planning appointment. Each session takes about 15 minutes.

The radiographer will carefully position you on the couch (in the same position you were in for your planning appointment) using the permanent marks to align you correctly.

The machine will move around you and may touch you, but this will not hurt. Once the radiographers have completed their checks they will leave the room to switch the machine on.



**Figure 1. Virtual image of the radiotherapy treatment machine.**

The actual treatment lasts a few minutes, during which you will be alone in the room. The radiographers will be observing and, if necessary, will be able to talk to you from the next room where they will be able to hear you at all times. You will not feel anything when the machine switches on, but you will hear the machine buzzing.

### **Radiotherapy to the axilla/supra clavicular fossa (the area above the collarbone)**

Some patients require treatment to their axilla/supra clavicular fossa. If this is necessary your doctor will discuss this with you.

### **Respiratory gating**

If you are having your left breast treated, radiotherapy treatment may affect your heart – respiratory gating is one method used to help minimise the effect. Not everyone will require this and it is not suitable for every patient. You may need an extra visit to the department before you can start your treatment.

Your doctor/radiographer will discuss this with you in more detail as necessary.

During your treatment you will have weekly reviews by the radiotherapy review specialist nurse and a final review on or near the last day of your treatment.

### **Side effects of radiotherapy treatment**

Radiotherapy causes side effects because it affects normal cells as well as cancer cells. Normal cells are better more able to recover than cancer cells, but they may be damaged by the radiation in the short or long term.

Although most side effects are temporary, some may be permanent and some may occur months or even years after treatment. Your doctor, nurse or radiographer will discuss this with you so that you know what to expect.

Please let us know about any side effects that you have during or after treatment. There are often things that can be done to help.

## Skin reaction

Initially, you may notice some redness (similar to sunburn), and if you have darker skin, it may darken or develop a blue or black tinge. Increased pigmentation (darkening), tenderness or itching of the skin in the treatment area usually occurs around 10-14 days after treatment has started, although this can sometimes occur later on or after treatment has finished. As the treatment continues, the skin may peel or flake and this may result in a red, sore, moist and weepy skin reaction.

Your radiotherapy review specialist and radiographer will monitor the reaction and advise you on how to take care of your skin. It's important to take special care of the skin on the area being treated.

You will be given specific skin care instructions and there are some things you can do to help:

- Avoid using any perfumes, deodorants or dressings on or near the treatment area, unless advised to do so by your radiographer or radiotherapy review specialist.
- You will be advised on a cream to soothe your skin in the area being treated. However do not apply any general moisturising creams or gels to relieve tenderness in the area before discussing it with your radiographer/radiotherapy review specialist.
- Showers are better than baths, but turn away from the spray to protect your breast.
- Avoid soaking the affected area for too long if you do have a bath.
- Gently pat the area dry with a soft towel – do not rub the skin.
- Avoid exposing the treated area to extremes of temperature such as hot water bottles, heat pads, saunas or ice packs during treatment.
- Make sure that your skin is covered when you are out in the sun. Even when treatment is finished, it may be more sensitive to sunlight for some months afterwards. It is advisable to:
  - limit the amount of time you are exposed to the sun
  - wear suitable clothing to cover the area
  - regularly apply sun cream with a high sun protection factor (SPF 30 or above) and continue using high factor sun cream for at least one year after treatment.
- During treatment and shortly after (until any skin reactions have healed) you may want to avoid swimming – a wet swimsuit may rub the skin and cause you discomfort. Also the chemicals, such as chlorine, in a swimming pool can make the skin dry and irritated. If you swim regularly, you may want to discuss this further with your specialist.
- Because friction or rubbing can increase skin reactions, a soft cotton bra or vest may be more comfortable than wearing an underwired bra until your skin heals. Alternatively, you may prefer to go without a bra.
- If you've had your breast removed (a mastectomy) and have been wearing a silicone prosthesis, you may find it more comfortable to wear the soft, lightweight prosthesis (softie/comfie) you used straight after surgery.

If you develop a skin reaction, it should heal within three to four weeks of your last treatment. You will continue to have appointments with the radiotherapy review specialist nurse until you are both happy with the skin reaction and healing process.

### **Pain in the breast area**

Occasionally you may have aches, twinges or sharp pains in the breast area. Although these are usually mild, they can continue for some time after treatment is finished. In some cases they can continue for months or even years, but they usually become milder and less frequent over time.

You may also experience stiffness and discomfort around the shoulder and breast area from lying in the treatment position. This may also happen after treatment has finished. Continuing with your arm and shoulder exercises during and after treatment can help minimise or prevent any stiffness or discomfort happening.

### **Tiredness**

Radiotherapy may make you feel tired – this may continue for a month or two after it finishes. Gentle exercise can help, but save your energy for the activities you enjoy doing.

You may experience some or all of these side effects. They may continue for 10-14 days after treatment, but should then begin to improve.

Always let us know of anything worrying you. We want to help you recover as soon as possible.

### **Possible late side effects**

These are side effects that can develop months or even years after the end of radiotherapy treatment. However, improvements in the technology and the accuracy of marking the exact areas to be treated means many of these side effects have become less common. Serious side effects are very rare and experts agree that the benefits of the treatment, in reducing the chances of the breast cancer returning, outweigh the risk of possible side effects.

- A few months after radiotherapy some women develop breathlessness due to the effect of radiotherapy on the lung. It usually gets better within two to four weeks without any treatment or with a short course of steroid medicines. Radiotherapy rarely causes any long-term damage to the lungs.
- Although some women may worry about the effects of radiotherapy on the heart, it is now very carefully planned to avoid including the heart in the treatment area. It very rarely causes heart problems, and only women who had cancer in their left breast may be at risk.
- Rarely, radiotherapy may weaken the ribs in the treated area, making them more likely to fracture than normal.
- Lymphoedema is swelling caused by a build-up of lymph fluid in the tissues. This is usually as a result of damage to the lymphatic systems following surgery. Radiotherapy to the lymph nodes under the arm and surrounding areas (such as neck or chest) can increase the risk of lymphoedema. If this is relevant to you, your doctor will discuss this with you.

If you are worried about the risk of developing particular side effects from radiotherapy, talk it over with your clinical oncologist (radiotherapist).

## **After treatment finishes**

Side effects may get worse for two weeks after radiotherapy has finished but will then start to improve. Your radiotherapy review specialist will see you one week after you have completed your treatment. If both of you are happy with the skin care, no further appointments are needed. You can always contact the department afterwards if you have any concerns. If you experience a more severe skin reaction, you will need additional follow-up appointments with your radiotherapy review specialist.

It is important that you have regular check-ups after completion of your treatment. This is usually done by your breast surgeon, but if you have had chemotherapy your oncologist will want to see you regularly as well.

Please make sure you have an appointment to see your doctor six to eight weeks after completing radiotherapy treatment. If you have any concerns or questions about radiotherapy please contact the radiotherapy review specialists.

## **Support available at the Royal Free Hospital**

We have a number of support services available for you to access. If you would like to know more about them, please read our leaflet: [‘What support is available to you on a diagnosis of cancer?’](#) or pick up a copy in the Macmillan cancer information and support centre at the Royal Free Hospital.

We are here to help, and if you have any questions or concerns, please do not hesitate to speak to a member of staff.

## Our contact numbers

- Radiotherapy review specialist: 020 7830 2919
- Breast care nurses: 020 7794 0500 ext 35359
- Radiotherapy and oncology counsellors: 020 7472 6739
- Radiotherapy department reception: 020 7830 2919
- Radiotherapy information service: 020 7472 6739

## Other useful contacts and websites

### Breast Cancer Care

- Phone: 080 8800 6000
- Website: [www.breastcancercare.org.uk](http://www.breastcancercare.org.uk)

### Macmillan Cancer Support

- Macmillan cancer information and support centre at the Royal Free Hospital: 020 7794 0500 ext 31337
- Macmillan cancer information and support centre at Barnet Hospital: 020 8216 4142
- Macmillan's support line: 080 8808 0000
- Website: [www.macmillan.org.uk](http://www.macmillan.org.uk)

### Maggie's at the Cancerkin Centre

- Phone: 020 7830 2323
- Website: [www.cancerkin.org.uk](http://www.cancerkin.org.uk)

## More information

For more information about cancer services at the Royal Free London, please visit our website: [www.royalfree.nhs.uk/services/services-a-z/cancer-services](http://www.royalfree.nhs.uk/services/services-a-z/cancer-services)

## Your feedback

This booklet was written by staff from the radiotherapy department. If you have any comments on this leaflet please call 020 7472 6739 and leave a message for the information officer.

Alternatively, please email: [rf.communications@nhs.net](mailto:rf.communications@nhs.net)

## Alternative formats

This leaflet is also available in large print. If you need this leaflet in another format – for example Braille, a language other than English or audio – please speak to a member of staff.

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