breast cancer care
the breast cancer support charity

Radiotherapy for primary breast cancer

This booklet explains what radiotherapy is, when it's given and its possible side effects. You may also find it helpful to read our **Treating breast cancer** booklet for an overview of breast cancer and its treatment. Men with breast cancer can also read our **Men with breast cancer** information pack.

Treatment and side effects

Contents

Introduction

We hope this booklet will answer any questions you have and help you talk to your specialist team if you have concerns about your radiotherapy treatment. We've also included a list of questions you may want to ask your oncologist (cancer specialist) on page 6.

This booklet is about radiotherapy for primary breast cancer. This is breast cancer that has not spread beyond the breast or the lymph nodes (glands) under the arm. The booklet does not specifically cover radiotherapy to treat breast cancer recurrence (breast cancer that has returned after treatment) or secondary breast cancer (when breast cancer spreads to somewhere else in the body).

What is radiotherapy?

Radiotherapy is a treatment for cancer that uses carefully measured and controlled high energy x-rays. In primary breast cancer, it aims to destroy any cancer cells that may be left behind in the breast area after surgery.

The x-rays are produced by a machine called a linear accelerator (often referred to as a linac), which focuses on the exact area to be treated.

Radiotherapy also affects healthy tissue in the area being treated. However, this is generally able to recover and repair itself. It's given in such a way that it has the greatest effect on the cancer cells while limiting damage to healthy tissue.

In primary breast cancer, radiotherapy treats the site where the cancer started. This is sometimes called local control (surgery is another example of local control).

Radiotherapy is a specialised treatment and is not available in every hospital. However, each breast unit is linked to a hospital that has a radiotherapy department where you'll be treated as an outpatient.

Why may I need radiotherapy?

Radiotherapy is given after surgery to reduce the risk of the cancer returning in the breast area. You may hear this called adjuvant (additional) therapy.

Whether you're offered radiotherapy will depend on your individual situation. When deciding on the best treatment, your specialist team will consider factors such as the location, grade, size and stage of your cancer. You can find out more about how decisions are reached about your treatment by reading our booklet **Understanding your pathology report**.

Which areas are treated?

If you had breast-conserving surgery (removal of the cancer and an area of normal breast tissue around the cancer) you'll usually be given radiotherapy to the remaining breast tissue on that side.

If you had a mastectomy (complete removal of the breast), you may be given radiotherapy to the chest in the area where you had your surgery. This may be done for a number of reasons, for example because:

- the tumour was large
- the tumour was near the chest wall or deep within the breast tissue
- there's a high risk that cancer cells may have been left behind
- cancer cells are found in the lymph nodes (glands) under the arm (axilla).

Sometimes the lymph nodes under the arm and above the collarbone (clavicle) will also be treated with radiotherapy. This will depend on the type of surgery you've had and whether the underarm lymph nodes contained cancer cells. Your specialist will discuss this with you.

The sequence and timing of radiotherapy will depend on your individual situation and any other treatment you are having.

Questions you may want to ask your specialist team

- Why are you recommending radiotherapy?
- What are the benefits and risks?
- What are the side effects?
- Are there any other treatments I could have?
- Which area(s) will be treated?
- How long will the radiotherapy take and how often will each treatment be given?
- How long will I have to wait before starting treatment?
- Will having radiotherapy affect my reconstructed breast or my options for breast reconstruction in the future?
- What is my risk of lymphoedema (swelling of the tissues of the arm or breast/chest)?
- Are there any clinical trials for radiotherapy I could take part in?

Why may radiotherapy not be a treatment option?

Radiotherapy may not be a treatment option for you if:

- you have already had radiotherapy to that breast
- you have a medical condition which makes you particularly sensitive to the effects of radiotherapy
- you are pregnant.

How is radiotherapy given?

Radiotherapy for primary breast cancer can be given in several ways using different doses, depending on your treatment plan.

The total dose you receive is split into a course of smaller treatments, usually given daily over a few weeks. The unit of dose is called the Gray, or Gy for short. Each individual treatment dose given is known as a fraction. For example, a total of 40Gy may be given in 15 fractions over 15 working days (Monday to Friday).

For each area of the body treated there's a maximum dose (number of Gy) that can be given. This is based on evidence which has identified the most effective and safest dose. Therefore, if breast cancer returns

in the same breast, treating that area with radiotherapy may not be possible if that maximum dose has previously been reached.

Radiotherapy is carried out by therapeutic radiographers (people trained to give radiotherapy). Most centres in the UK have male and female radiographers. If you have any concerns about this, talk to your oncologist, breast care nurse or therapeutic radiographer, either before or at your planning appointment (see page 11).

External beam radiotherapy

External beam radiotherapy is the most common type of radiotherapy used to treat primary breast cancer. X-rays are delivered by a machine called a linear accelerator with the beam directed to the body through the skin.

You'll need to take care of the skin over the area that's being treated. Before starting radiotherapy you'll be given information about skincare which you can discuss with your breast care nurse, radiotherapy clinic nurse or therapeutic radiographer. You can read more about skin reactions on page 16.

The x-rays do not make your body radioactive so when you leave the treatment room you can safely mix with other people, including children.

Intensity modulated radiotherapy (IMRT)

Intensity modulated radiotherapy (IMRT) is a different way of giving external beam radiotherapy. It allows the dose to be adjusted to better fit the area being treated and to better protect nearby healthy tissue.

Giving radiotherapy in this way means that the treatment beams fit the outline of where the cancer was more precisely, and this allows different doses to be given to different areas when necessary. Most radiotherapy centres in the UK provide IMRT. If your specialist recommends IMRT but it isn't available at your centre, arrangements can be made to have the treatment at another hospital. However, IMRT isn't suitable for everyone.

Other ways of giving radiotherapy

Advances in radiotherapy treatment for breast cancer are continually being made as a result of clinical trials, which look at different ways of giving treatment while minimising side effects. The following types of radiotherapy are less commonly used and are not widely available but may be discussed with you.

Respiratory gating

Respiratory gating involves taking a deep breath in, at a particular place in your normal breathing cycle, and holding it for a brief time. It's done both at the treatment planning appointment (see page 11) and at each external beam radiotherapy treatment appointment.

The purpose of respiratory gating is to protect the heart or chest wall for people having radiotherapy treatment to the left side. The heart is located on the left side of the body, and using a breath-hold technique can help protect the healthy tissues underneath the breast, reducing the chances of long-term side effects such as heart disease.

Your need for gating will be assessed and simple coaching instructions will help you maintain a suitable breath hold. Not everyone having their left side treated will need to use this method, and there are other ways to protect your heart which your specialist can talk to you about.

Brachytherapy

Brachytherapy involves placing the radiation source inside the body in the area to be treated, therefore protecting the skin. It's usually only given as part of a clinical trial. Narrow, hollow tubes or a small balloon are put in the body where the breast tissue has been removed. Then radioactive wires are inserted through the tubes or into the balloon. The radioactive wires may be left in place for a few days or inserted for a short time each day. Depending on the type of brachytherapy you have, you may need to have your treatment as an inpatient and be kept in a single room for a short time due to the active radiation. If brachytherapy is an option your specialist will discuss it fully with you.

Intraoperative radiotherapy

Another method of giving internal radiotherapy is intraoperative radiotherapy. Instead of using high energy x-rays directed from outside the body, this type of treatment uses low energy x-rays given from a machine in the operating theatre during breast-conserving surgery. Radiotherapy is given directly to the internal area where the cancer was, once it has been removed. A single dose of radiation is given in one treatment. This may be the only dose of radiotherapy required, or if necessary, it can be followed by external beam radiotherapy (see page 7), but over a shorter timeframe. This new type of radiotherapy treatment is not yet widely available and it isn't suitable for everyone.

Radiotherapy and breast reconstruction

Many women consider having breast reconstruction after a mastectomy. This can be done at the same time as a mastectomy (immediate reconstruction) or at a later date (delayed reconstruction).

Radiotherapy can affect the elasticity and quality of the skin over the area which is treated. For this reason, radiotherapy treatment may affect the timing and type of reconstructive technique suitable for each person. Talk to your specialist team if you've had breast reconstruction or would like to consider it in the future. See our **Breast reconstruction** booklet for more information.

Your radiotherapy treatment

Your specialist or breast care nurse can tell you when you can expect to start your radiotherapy.

Radiotherapy for primary breast cancer is given after surgery. If you're having chemotherapy (treatment aimed at destroying cancer cells using anti-cancer drugs) after surgery, radiotherapy can be given towards the end of the chemotherapy or, more commonly, after chemotherapy has finished.

National guidance recommends you shouldn't have to wait more than 31 days in England, four weeks in Wales or 42 days in Scotland between surgery or the end of chemotherapy and the start of radiotherapy.

However, some people have to wait longer than this. Radiotherapy can also be delayed for a medical reason, such as waiting for a surgical wound to heal.

You'll first see the specialist in the outpatient department to talk about your treatment. Once the treatment, its benefits, risks and potential side effects have been fully explained to you, you'll be asked to sign a consent form. A further appointment is then made to plan your treatment.

Guidelines for England and Wales recommend that radiotherapy for primary breast cancer is given as a daily course of treatment over five

days a week (Monday to Friday) for three weeks. This guidance may not be in effect across all radiotherapy centres, so your radiotherapy treatment may be given in a slightly different way, for example a smaller daily dose over a longer timeframe. You will still be getting effective treatment.

Some people need extra treatments to a smaller area where the cancer was located. This is known as a boost (see page 14).

Where possible, your appointments will usually be arranged for a similar time each day so you can settle into a routine. It's important that treatment continues as planned and that you don't miss any appointments. If, for example, you have a holiday booked, tell your specialist or therapeutic radiographer before or at your planning appointment so that together you can decide what arrangements to make.

When you have your first appointment with the specialist you may be invited to take part in a clinical trial. For more general information on clinical trials see our website, or **www.cancerresearch.org.uk** for listings of current UK trials.

Other drugs

It's important to tell your specialist about any drugs you're taking or considering taking. This includes vitamin and mineral supplements that are bought over the counter. The scientific evidence isn't clear about how safe it is to take vitamins, particularly high-dose antioxidants (including vitamins A, C and E, Co-enzyme Q10 and selenium), during your radiotherapy.

Some studies suggest taking supplements might interfere with the action of the radiotherapy and make it less effective. Other studies have suggested they could help reduce the side effects of treatment without reducing its effectiveness. Because the safety evidence is not clear, many specialists recommend that people avoid taking high-dose antioxidant supplements during radiotherapy. For the same reasons, you should also talk to your specialist before taking any herbal remedies or supplements.

Treatment planning

Before your radiotherapy can begin, it's important that your wound is fully healed or any build-up of fluid (seroma) in the area has settled. It may be possible to plan your radiotherapy treatment earlier than this, but the start of treatment may be delayed until these issues have been resolved.

Treatment planning identifies the exact area to be treated and the most effective dose of radiation. The area treated usually includes the whole breast area on the side where the cancer was. It may also include the area under your armpit (axilla) and the area under the collarbone (clavicle) on the side where the cancer was. Occasionally, the area under the breast bone (sternum) may also be treated.

A number of people will be involved in planning your treatment, including:

- your oncologist or a member of their team
- a therapeutic radiographer
- a radiation physicist (specialist in the measurement of radiation).

They will look at your individual situation carefully before a specific treatment plan is worked out.

Because your treatment is planned just for you, don't be concerned if someone you know is having different treatment even if they had the same operation. Radiotherapy needs to be given in the most effective way for each person to cause the fewest possible side effects.

If you have a pacemaker or implantable cardioverter defibrillator (ICD), you must tell your specialist or therapeutic radiographer either before or during your first planning appointment. These devices can be affected by radiotherapy so treatment has to be planned to allow for them.

Treatment planning will be done using a CT (computerised tomography) scanner. A CT scanner takes x-ray images in 3D to produce a detailed plan to treat the exact area while limiting the amount of radiation to surrounding tissues.

Depending on the type of equipment used, this planning session may last from 15 minutes to an hour. You'll need to lie very still while your arm on the side being treated is positioned above your head and supported

in an arm rest (see page 13). In some units you may be asked to raise both arms above your head, even though you'll only be having treatment to the affected side.

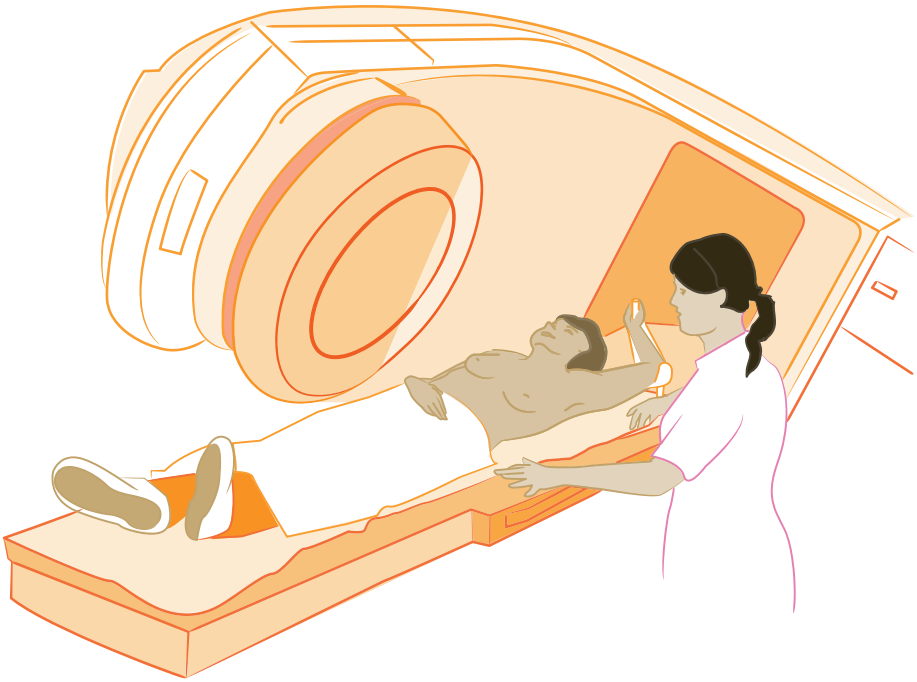
It's important that you've regained your arm movement after surgery and can comfortably raise your arm(s) above your head before you start, so treatment can be given to the whole breast or chest area. After surgery it can be difficult or painful to lift your arm above your head and keep it there. If this is the case, talk to your breast care nurse or ask to see the physiotherapist, who'll be able to advise you about arm exercises to improve the movement in your arm. You could also try taking some pain relief before the appointment so that you feel more comfortable holding the position.

Our **Exercises after breast cancer surgery** leaflet demonstrates arm and shoulder exercises suitable to help get back arm and shoulder movement after surgery for breast cancer.

When the exact area of treatment has been decided, it's important to have a record of the area to help position you precisely for each treatment. To do this, permanent ink markings are made on your skin to show where this is. It's usually done by making tiny permanent skin dots (usually three) using a pinprick of ink. If this is a concern for you, ask your therapeutic radiographer if any other options are available.

It may be possible to make temporary markings using an indelible pen. However, this is not always appropriate. If temporary markings are used, you'll be asked not to wash them off until treatment is finished, although they fade and may sometimes rub off. It can be helpful to think about the clothing you wear to this appointment. You may want to wear an old cotton T-shirt or vest as the ink can stain your clothes.

Once the planning is complete, your radiographer will arrange with you when to come for your first treatment.



A linear accelerator

During your treatment

When you go for treatment you'll be asked to undress above the waist and may be given a gown to wear. It can be helpful to wear a top that's easy to take off and put on.

You'll be asked to lie down on the treatment couch with your arm(s) above your head. If you're wearing a gown, the therapeutic radiographer will adjust it to expose the area to be treated. They'll help position you carefully so that each time you have treatment, you're in exactly the same position you were during the treatment planning. When you're in the correct position you'll be asked to stay very still while the machine moves around you, but you can breathe normally. If you're having respiratory gating (see page 8), your therapeutic radiographer will tell you how and when to hold your breath.

Treatment to the breast or chest wall is usually directed from different angles. The radiographer responsible for your treatment will reposition the machine for each angle. The machine may come quite close to you and even touch you. However, you won't feel any sensation while the treatment is being given, although you may feel a little uncomfortable staying in the treatment position.

Once the positioning is correct, the treatment takes only a few minutes. The linac makes a buzzing noise while in operation. Although you'll be left alone in the room, the radiographers will watch through a window or on a television screen. Most radiotherapy departments also have an intercom system so that you and the radiographers can talk to each other.

Some people will have a radiotherapy boost treatment to the original site of the cancer or scar area, particularly if the specialist thinks there's a higher risk of the cancer returning in the breast area. If you're having IMRT (see page 7), the boost can be given by planning the radiotherapy to deliver a higher dose to this area when your whole breast is being treated. If you're having standard external beam treatment, the boost will be given at the end of treatment, usually as five to eight extra sessions on a different type of machine.

The therapeutic radiographers treating you will check how you are before each treatment. They can also answer your questions, give you advice on any side effects you may have and arrange an appointment with your specialist or breast care nurse if necessary. Alternatively, appointments to see one of your specialist team may be planned during treatment so you can discuss any concerns you have.

After the course of radiotherapy has finished, you may be given details of follow-up appointments to attend, but if at any time you have concerns, contact your hospital, breast care nurse or GP (local doctor).

Getting to and from appointments

Most people feel able to drive themselves to and from their regular radiotherapy appointments. Whether you drive or use public transport, travelling to your treatment several times a week can be expensive, but help may be available.

If you come by car, you may be able to have a special hospital pass which means you won't have to pay car parking fees while having your radiotherapy. If you claim benefits or are on a low income, you may be entitled to help with petrol costs or bus or train fares. Alternatively, there may be community transport services in your area or organisations with volunteer drivers who give people lifts to and from hospital.

Macmillan Cancer Support (contact details on page 24) produces a booklet called Help with the cost of cancer which outlines what you may be entitled to. The NHS leaflet Help with health costs (HC11) may also be useful. You can find it on the NHS Choices website www.nhs.uk or ask for a copy at the hospital.

If you think going to appointments will be difficult because of the cost or other travel issues, talk to your radiographer or breast care nurse to find out what help might be available. If you have a local cancer information centre, they may be able to tell you if any financial help or voluntary community transport is available in your area.

What side effects might I have?

Radiotherapy causes side effects because it affects healthy tissue as well as cancer cells. Healthy tissue is better able to recover than cancer cells, but 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 appear months or even years after treatment finishes.

Precise planning helps keep side effects from radiotherapy to a minimum. Particular care is taken to try to avoid unnecessary radiotherapy to the tissues of the heart and lungs, and to avoid treating the same areas more than once when different angles are used to deliver the radiotherapy.

Everybody reacts differently to radiotherapy and as it progresses you'll have a better idea of how it's affecting you. However, certain side effects are more common than others.

Immediate side effects

Immediate side effects may also be described as early or acute side effects. These are side effects that occur during treatment and up to six months after treatment has finished.

Skin reactions

Everyone who has external beam radiotherapy is at risk of skin damage during or after treatment. The extent of the reaction will depend on a number of factors, including the dose of radiotherapy given, your skin type and any existing skin conditions you may have, such as eczema. If you have a skin condition, mention it to your specialist team before starting treatment as it may be useful to be referred to a dermatologist (skin specialist) for advice.

You will probably notice some redness like sunburn, darkening, tenderness and/or itching of the skin in the treatment area. These usually occur around 10 to 14 days after starting treatment, but can happen later in treatment or after it has finished. The skin may peel or flake as treatment goes on, and this may result in a red, sore, moist and weepy skin reaction, although this isn't the case for most people. Your therapeutic radiographer or radiotherapy clinic nurse will keep an eye on this and tell you how to take care of your skin according to the type of reaction you have.

It's important to take special care of the skin on the area being treated. You'll be given specific skincare instructions by the therapeutic radiographers in your centre. Most centres advise the following.

- Wash the treated area gently with warm water, using a mild and gentle soap. Pat the skin dry with a soft towel.
- Have a shower rather than a bath.
- Use a non-perfumed deodorant.
- Use a mild and gentle moisturiser to keep the skin soft.
- If you want to use anything else on the skin in the treatment area, discuss this with your therapeutic radiographer first.
- Avoid exposing the treated area to extremes of temperature such as hot water bottles, heat pads, saunas or ice packs during treatment.
- Avoid exposing the treated area to sun while having radiotherapy and afterwards until any skin reaction has settled down.
- Avoid getting sunburnt after treatment by using a sunscreen with a high sun protection factor (SPF). Apply it even under clothes too as it's possible to get sunburnt through clothing.

- You may want to avoid swimming during treatment and shortly afterwards (until any skin reactions have healed), as a wet swimsuit can rub the skin and cause discomfort. Also the chemicals in a swimming pool can make the skin dry and irritated. Talk to your specialist or therapeutic radiographer if you normally swim regularly and want to continue.
- Because friction or rubbing can cause or worsen skin reactions, wearing a soft cotton bra or vest may be more comfortable. You're usually advised not to wear 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 or cumfie) you used straight after surgery. You can find more about this in our booklet **A confident choice: breast prostheses, bras and clothes after surgery**.

If you develop a skin reaction, it should heal within three to four weeks of your last treatment. If it doesn't heal within this time, or you have a more severe reaction such as skin peeling or blistering, contact your radiotherapy team, breast care nurse or GP for advice.

Swelling (oedema) of the breast

During treatment your breast or chest area may appear swollen and feel uncomfortable. This usually settles within a few weeks after treatment. If it continues after this time, talk to your specialist or breast care nurse as you may need to be seen and assessed by a lymphoedema specialist (see page 19 for more information).

Pain in the breast area

Now and then you may have aches, twinges or sharp pains in the breast or chest area. Although these are usually mild, they can go on for some time after treatment has 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/chest area during and after treatment. Continuing to do arm and shoulder exercises during your radiotherapy and for several months after it has finished may help minimise or prevent any stiffness or discomfort. See our **Exercises after breast cancer surgery** leaflet for arm and shoulder exercises that can help with stiffness or discomfort.

You can find more tips on managing pain after treatment in our **Moving Forward** information pack.

Tiredness and fatigue

Generally, radiotherapy to the breast doesn't make people feel unwell, but you may feel very tired during or after your treatment.

Travelling to and from hospital can be tiring in itself. However, many people find they can still manage their daily tasks as usual and some continue to go to work throughout their treatment.

Fatigue is extreme tiredness and exhaustion that doesn't go away with rest or sleep and may affect you physically and emotionally. This is a very common side effect of cancer treatment. It may start or become worse after radiotherapy has finished. If you have also had chemotherapy as part of your treatment you may already be experiencing fatigue by the time you start radiotherapy.

Everyone's experience of fatigue is different. It's important to know what your limits are and not to expect too much of yourself.

You may find the following tips helpful.

Tell your specialist or breast care nurse how you feel. Your fatigue may have a treatable cause (for example iron supplements can be prescribed for anaemia).

Consider using a fatigue diary. This can identify the triggers of fatigue and show changes in energy levels, helping you plan your day to get the most out of times when you have more energy.

There's strong evidence that exercise reduces fatigue. Aim to do short amounts of activity or light exercise, such as walking, each day. For ideas, see our DVD **Eat well, keep active after breast cancer**.

- Get plenty of rest between your daily activities but try to limit naps to less than an hour so that you sleep at night.
- Use relaxation techniques to relieve tension and regain energy. There are many good relaxation CDs that can guide you through different techniques.
- Drink plenty of fluids. Being dehydrated can make you tired.
- Make the most of the times when your appetite is good, choosing healthy high-calorie foods for energy.

- Accept offers of practical help from others where possible.
- Consider emotional (psychological) support. This could be individual counselling or in a support group. There's some evidence this may help reduce fatigue.

Lymphoedema

Lymphoedema is swelling of the arm, hand or breast area caused by a build-up of lymph fluid in the surface tissues of the body. It can occur as a result of damage to the lymphatic system, for example because of surgery and/or radiotherapy to the lymph nodes under the arm (axilla) and surrounding area.

Lymphoedema is a long-term condition, which means that it can be controlled with appropriate treatment, but will never completely go away. If the arm, hand or chest area on the side where the radiotherapy or surgery were carried out swells or feels uncomfortable and heavy, contact your breast care nurse or GP.

For more information see our **Reducing the risk of lymphoedema** booklet. If you develop lymphoedema you may find it useful to read our **Living with lymphoedema after breast cancer** booklet.

Change in breast shape, size and colour

If you've had radiotherapy after breast-conserving surgery (wide local excision or lumpectomy), the breast tissue on the treated side may feel firmer, or the breast may feel smaller in size and look different to before. This is because the breast is not a regular shape and it's not possible to get an even dose of radiotherapy over the whole area being treated. This is normal and nothing to worry about. However, if you're concerned about differences in the size of your breasts, or if the difference is noticeable when you're dressed, discuss this with your breast surgeon or breast care nurse.

Hair loss in the armpit or chest area

Radiotherapy to the armpit will make the underarm hair fall out on that side. Men may also experience hair loss in the area of the chest that's being treated. Hair usually starts to fall out two to three weeks after treatment has started and it may take several months to grow back. For some people, hair lost from radiotherapy may not grow back at all.

Sore throat

If you have treatment to the area around your collarbone, you may develop a sore throat or discomfort when swallowing, during or after your treatment. If this happens, talk to your therapeutic radiographer, specialist or breast care nurse. It may help to take some simple pain relief in liquid form, particularly before eating, until the discomfort settles.

Late side effects

Some side effects can develop months or even years after the end of radiotherapy. However, improvements with the technical equipment and accuracy in marking the exact areas to be treated mean many of these side effects have become much less common.

Serious side effects are very rare and experts agree that the benefits of the treatment in reducing the chances of breast cancer returning outweigh the risk of possible side effects.

Radiotherapy to the breast and/or under the arm can cause hardening of the tissue. This is known as fibrosis and is caused by a build-up of scar tissue. If the fibrosis becomes severe, the breast can become noticeably smaller as well as firmer. This may happen several months after radiotherapy has finished. Under the skin you may also see tiny broken blood vessels, known as telangiectasia. This is permanent and there's no treatment for it.

Tenderness can occur over the ribs during treatment. In some people, this discomfort may continue but usually improves gradually over time.

Sometimes after treatment to the breast/chest area, part of the lung behind the treatment area can become inflamed, causing a dry cough or shortness of breath. This usually heals by itself over time. More rarely, fibrosis of the upper lung can occur, causing similar side effects.

Although particular care is taken to avoid unnecessary radiotherapy to the tissues of the heart, if radiotherapy is given to these areas you may be at risk of heart problems in future. Other serious side effects that can occur later include:

- weakening of the bones in the treated area, which can lead to rib and collarbone fractures
- damage to the nerves in the arm, which may cause tingling, numbness, pain, weakness and possibly some loss of movement.

If you're concerned about any of these late side effects, speak to someone in your specialist team.

Can I use complementary therapies?

Many people use complementary therapies to try to help them cope with breast cancer treatment and improve their overall sense of wellbeing, even though there's very little reliable research to show their effectiveness.

Some therapies are available in NHS hospitals, so ask your specialist or breast care nurse for details if you're interested. If you're thinking of having a complementary therapy, check with your specialist team to ensure that it will not affect any of your treatment. For more information, see our **Complementary therapies** booklet.

Coping during treatment

Being told you need radiotherapy can cause a range of emotions. Many people feel positive and secure knowing that everything possible is being done to treat their breast cancer. Some people feel upset, frightened or have difficulty adjusting to what's happening to them and may be worried about their planned treatment. Fear of the unknown is common, so finding out as much as possible about your radiotherapy may help you cope better.

Many centres have times when you can visit the radiotherapy department beforehand so you know what to expect. You can ask your breast care nurse about arranging a visit.

If you're feeling low, tired or anxious at any point during or after your treatment, remember there are people who can help you. Tell your specialist or breast care nurse how you're feeling so that they can offer help and support, and let family and friends know too.

After treatment finishes

Once you've finished treatment it may take some time to get back to your everyday routine. Try not to expect too much of yourself in the early days and weeks after your treatment and give yourself time to heal and regain your strength. You may continue to feel tired for some time, but gradually you'll start to feel better. For some people, this may take several months and sometimes longer.

For many people, the last hospital-based treatment is the end goal they focus on, and getting there can feel like real progress. But some people also feel isolated, low and fearful, especially when their regular hospital appointments stop.

Our **Moving Forward** information pack is for anyone living with and beyond breast cancer, helping you approach life after treatment with more confidence. It contains information on a wide range of topics that may be relevant to you, from ongoing side effects of treatment to worries about the cancer coming back or going back to work.

You may find it helpful to share your feelings with someone who has had a similar experience to you. You can do this in a local breast cancer support group, online on the Breast Cancer Care Forum or through our Someone Like Me service (see 'Helping you face breast cancer' opposite).

You may also like to read our booklet **Breast cancer and you: diagnosis, treatment and the future** which looks at the experiences of a range of people with breast cancer.

Helping you face breast cancer

Treatments for breast cancer can be complex and if you're wondering where to turn for support in making treatment decisions or coping with side effects, we can help with practical and emotional support.

Ask us

Our free Helpline is answered by specialist nurses and trained staff with personal experience of breast cancer. They understand your issues and can answer questions. Or you can Ask the Nurse by email on our website.

Free Helpline **0808 800 6000** (Text Relay 18001)
Monday–Friday 9am–5pm, Saturday 10am–2pm
www.breastcancercare.org.uk/ATN

Talk to someone who understands

Our Someone Like Me service puts you in contact by phone or email with someone else who's had breast cancer and who's been trained to help.

Online, you can chat to other people going through breast cancer on our professionally moderated discussion Forum or join a free, weekly Live Chat session.

In your area

We provide a variety of services in person across the UK, including:

HeadStrong prepares you for the possibility of losing your hair because of cancer treatment. In a private meeting, trained volunteers talk with you about how to look after your scalp before, during and after treatment. They'll also share ideas on how to make the most of scarves, hats and other headwear.

Moving Forward Information Sessions and longer courses on adjusting to life after treatment. Both have expert speakers and offer the chance to talk to other people in the same situation as you.

Find out about all our services for people affected by breast cancer at **www.breastcancercare.org.uk/services** or phone the Helpline. We can help you decide which of our services are right for you.

Useful organisations

Macmillan Cancer Support

89 Albert Embankment, London SE1 7UQ

Website: www.macmillan.org.uk
General enquiries: 020 7840 7840
Helpline: 0808 808 0000
Textphone: 0808 808 0121 or Text Relay

Macmillan Cancer Support provides practical, medical, emotional and financial support to people living with cancer and their carers and families. It also funds expert health and social care professionals such as nurses, doctors and benefits advisers.

Notes

We're here for you: help us to be there for other people too

If you found this booklet helpful, please use this form to send us a donation. Our information resources and other services are only free because of support from people such as you.

We want to be there for every person facing the emotional and physical trauma of a breast cancer diagnosis. Donate today and together we can ensure that everyone affected by breast cancer has someone to turn to.

Donate by post

Please accept my donation of **£10/£20/my own choice of £** ☐

I enclose a cheque/PO/CAF voucher made payable to **Breast Cancer Care**

Donate online

You can give using a debit or credit card at **www.breastcancercare.org.uk/donate**

My details

Name _____

Address _____

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Email address _____

We might occasionally want to send you more information about our services and activities

☐ Please tick if you're happy to receive email from us
☐ Please tick if you don't want to receive post from us

We won't pass on your details to any other organisation or third parties.

Please return this form to Breast Cancer Care, Freepost RRKZ-ARZY-YCKG, 5–13 Great Suffolk Street, London SE1 0NS

About this booklet

Radiotherapy for primary breast cancer was written by Breast Cancer Care's clinical specialists, and reviewed by healthcare professionals and people affected by breast cancer.

For a full list of the sources we used to research it:

Phone 0345 092 0808
Email publications@breastcancercare.org.uk

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breast cancer care
the breast cancer support charity

Breast Cancer Care is the only UK-wide charity providing specialist support and tailored information for anyone affected by breast cancer.

Our clinical expertise and emotional support network help thousands of people find a way to live with, through and beyond breast cancer.

Visit **www.breastcancercare.org.uk** or call our free Helpline on **0808 800 6000** (Text Relay 18001).

Central Office

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