

Treating Breast Cancer with Radiotherapy

About Radiotherapy

Radiotherapy treats cancer by using high-energy rays to destroy the cancer cells, while doing as little harm as possible to normal cells. Radiotherapy is often used after surgery for breast cancer. It may occasionally be used before, or instead of, surgery.

If part of the breast has been removed (lumpectomy) radiotherapy is usually given to the remaining breast tissue to reduce the risk of the cancer returning to that area. After a mastectomy, radiotherapy to the chest wall may be given if your doctor thinks there is a risk that any microscopic, invisible, traces of cancer were left behind. These could grow to form a recurrence of the cancer at a later date.

If a few lymph glands have been removed and these contained cancer cells, or if no lymph nodes have been removed, radiotherapy may be given to the armpit to treat the remaining lymph nodes. If all the lymph nodes have been removed from under the arm, radiotherapy to the armpit is not usually needed. It is normally given about 12 weeks after surgery. It is generally considered to be quite safe to wait this period of time, since even if treatment is not given for some months any seedlings of tumor would still be very small and should still be dealt with by the treatment.

A course of radiotherapy for breast cancer may last from 3–6 weeks. Radiotherapy for breast cancer does not make you radioactive and it is perfectly safe for you to be with other people, including children, after your treatment.

Planning Your Treatment

Planning is a very important part of radiotherapy and may take a few visits. It has to be carefully planned to make sure that it is as effective as possible. On your first visit to the radiotherapy department, you will be asked to have a CT scan or lie under a machine called a simulator, which takes x-rays of the area to be treated. Marks are usually drawn on your skin to help the *radiographer* (who gives you your treatment) to position you accurately and to show where the rays will be directed. These marks are usually permanent, but are tiny and barely noticeable.

The radiotherapy is normally given to the whole breast area. Some women may have an extra dose given to the area of the breast where the cancer was. This is known as a *booster dose*.

Treatment Sessions

At the beginning of each session of radiotherapy, the radiographer will position you carefully on the table, and make sure you are comfortable. During your treatment you will be left alone in the room but you will be able to talk to the radiographer who will be watching you from the next room. Radiotherapy is not painful but you do have to lie still for a few minutes while the treatment is being given.

Positioning

If you are going to have radiotherapy, you will need to be able to get your arm into position so that the radiotherapy machine can give the treatment effectively. Sometimes radiotherapy can make the muscles and shoulder joint feel stiff. If you can't move your shoulder normally, it may be painful or difficult to give the treatment. A physiotherapist may teach you some exercises to make the position for treatment feel easier.

Side Effects of Radiotherapy

Radiotherapy to the breast sometimes causes side effects such as reddening and soreness of the skin, nausea and tiredness. These side effects gradually disappear once your course of treatment has finished. The tiredness may continue for some months.

Radiotherapy may make the breast tissue feel firmer. Over a few months or years the breast may shrink slightly. The radiotherapy may also, rarely, leave small red marks on the skin, which are due to tiny broken blood vessels. For many women, however, the appearance of the breast is very good. Towards the end of the course of treatment, and for 3 to 4 weeks afterwards the skin may become a little inflamed, feeling rather hot and a bit sore like sunburn. This may lead to darkening of the skin. Very occasionally it can get more inflamed and actually break down, with loss of the outermost layer of skin, leaving the area pinkish-red and raw.

For skin care you must never put any talcum powder, creams, perfumed soaps, deodorants and anti-perspirants on the skin in the area that is being treated. You can only use an aqueous based cream on the area. Consult your doctor before using anything on the radiotherapy site. Your radiotherapist may recommend a protective cream for very fair skinned women.

Radiotherapy to the breast can sometimes lead to long-term side effects, such as nerve pain, tingling, and weakness or numbness in the arm and hand. Other rare side effects can include breathlessness which is due to the effect of radiotherapy on the lung, and weakening of the ribs in the treatment area. However, these long-term effects are very rare.

If you are worried about the risk of developing particular side effects from radiotherapy, you can speak to your radiotherapist. After your radiotherapy treatment, let your doctor know straight away if you have any arm or rib pain, or breathlessness.