



A guide for patients receiving internal vaginal brachytherapy

What is brachytherapy?

Brachytherapy is also known as internal radiotherapy and is used to deliver high doses of radiotherapy to the cervix (neck of the womb) and vagina.

Brachytherapy involves putting a small hollow tube (applicator) into your vagina. The radioactive source (the material that gives off the radiation) is put into the applicator using a treatment machine which is operated by radiographers.

The machine can safely deliver the radioactive source to the right place through the applicator and it is removed when the treatment is over. It delivers a high dose of radiotherapy directly to the area requiring treatment in a short period of time whilst minimising dose to surrounding tissue. You will have this done one to three times depending on your diagnosis and treatment plan. You should not feel anything from the treatment.

Brachytherapy treatment is delivered on its own or as a combination with a course of external beam radiotherapy. Your doctor will discuss with you which course of treatment is recommended. If you are scheduled to have external beam radiotherapy, brachytherapy is usually carried out at the end of the course of external beam treatment.

What are the benefits of brachytherapy?

Brachytherapy can help to improve the control or symptoms of gynaecological cancer. Your consultant will discuss this with you in more detail at your first appointment.

Are there any alternative treatments?

Cancer may also be treated with surgery and/or chemotherapy and your consultant will discuss with you whether these are possible treatments for you.

What happens when I come for my brachytherapy treatment?

When attending for your first visit report to the main reception desk. The receptionist will inform the brachytherapy radiographers, who will then collect you and take you to the brachytherapy treatment suite.

When you come for your treatment, you will be asked to empty your bladder before any procedure is carried out. This will help you feel more comfortable during the treatment procedure.

On your treatment appointments you will be asked to remove all clothing from the waist down and put on a hospital gown. If you prefer, you may wear a loose skirt or something similar.

On your first visit, your doctor will do an internal vaginal examination and decide on what applicator size is needed. This is because everyone is different and we have different applicators to suit different people. It is important to select the most appropriate applicator for you. The

applicator is lubricated and it is gently inserted into the vagina. It might feel a little uncomfortable but every effort will be made to make you as comfortable as possible on the treatment couch.

CT

You will then need to have a CT scan in the radiotherapy department so that your treatment can be planned by your doctor. You will be wheeled to the CT scanner room on a bed so that you don't have to get up.

You will then have a pelvic CT scan which will only take a few minutes.

Planning

After the CT scan you will be taken back to the brachytherapy treatment area whilst the planning is being done. This can take 30-40 minutes.

During treatment

Once the treatment had been planned the radiographers will check all the treatment information and take you into the brachytherapy treatment room.

The radiographers will then attach a small tube to the applicator that you have had inserted. Once this is attached the radiographers will leave the treatment room so that they can switch on the treatment unit.

The radiographers are watching you at all times using cameras and they can also hear you. The treatment is completely painless but if you did need the radiographers they would come to you straight away.

Whilst the treatment is being carried out you may hear lots of noises such as some beeping and buzzing. Don't panic this is all very normal and is just the noises the machine makes whilst carrying out the treatment.

The treatment will only take a few minutes. After it has finished the applicator will be gently removed by a radiographer and you can go home.

The radiographers will give you an appointment time to attend for your following treatments. For these appointments you should not require an internal examination or a CT scan. A radiographer will insert the vaginal applicator in the treatment room. The treatment will only take a few minutes. They will then remove the applicator and you can go home.

Are there any side effects?

Your doctor will have explained the potential side effects before you gave consent for your brachytherapy. These side effects are usually grouped into early and late side effects.

The most common side effects often occur soon after radiotherapy and these may continue for a few weeks after your treatment has finished. Late side effects are effects that are affecting you six months or longer after treatment or they can be side effects that occur weeks, months or years after your treatment has finished. Your doctor will explain all the potential side effects, even if they are quite rare.

Possible early side effects

These side effects are usually mild and gradually settle down in the weeks after your internal radiotherapy has finished and should be back to normal when you have your post radiotherapy follow-up appointment.

Bowel

You may experience diarrhoea. This can occur during your course of treatment but may continue for a few weeks after your treatment has finished.

If you are having diarrhoea, please tell the doctor or the radiographers who are treating you. They may provide you with a prescription for some medication to control the diarrhoea.

Bladder

When having internal radiotherapy to the pelvic area, you may feel that you want to pass urine more often and have a burning sensation when passing urine.

Make sure you tell your doctor or the radiographers if this happens. They will probably ask you to provide a urine sample to rule out an infection. The likelihood is that it is the radiotherapy causing the bladder to become irritated rather than an infection and this causes similar symptoms to cystitis. However if the urine test showed an infection, then antibiotics will be prescribed.

Make sure you carry on drinking plenty of fluids and continue good hygiene in the pelvic area. Bladder problems should settle down in the weeks following your internal radiotherapy and should be back to normal when you have your post radiotherapy follow-up appointment.

Vagina

After you have had the brachy therapy it is not unusual to have a small amount of bleeding and or discharge from the vagina. If it becomes heavy, or does not clear up, then contact your doctor.

On rare occasions it is possible for the vagina to tear when the applicators are being inserted. In either of these cases you would be seen by a specialist and given appropriate treatment.

Nausea

Occasionally nausea is experienced by people receiving radiotherapy. If you feel nauseous, please let the radiographers or someone from the oncology team know. They will be able to advise you or provide you with a prescription for medication.

Possible late side effects

These may occur months or years after finishing your course of radiotherapy. With the improvements of planning this is much more unlikely.

The bowel, bladder or vagina may be permanently affected.

In the majority of these cases the effects would be mild. These can include an increase in bowel motions, which can usually be controlled with diet, an increase in how frequently you need to empty your bladder and sometimes urgency to empty your bowels.

In very few cases, side effects may include bleeding from the bladder, narrowing of the bowel and a small risk of damage to the pelvic bones which could lead to a fracture or bone pain in the long term.

There is also a small risk of serious damage to the bladder, bowel or vagina leading to a hole or a narrowing requiring a corrective operation which may involve a colostomy or urostomy (wearing a permanent bag on the tummy for the stool or urine).

In these cases you would be reviewed by a specialist and appropriate treatment given.

Shrinking/narrowing and dryness of the vagina

Sometimes radiotherapy treatment can cause a narrowing and shortening of the vagina due to scar tissue forming. It is important to keep your vagina open to prevent problems for future examinations and to help you resume sexual intercourse if you wish to.

During your course of treatment you will be seen by a radiographer or a nurse. They will offer you a set of vaginal dilators which may help to prevent this side effect from causing you problems in the future. The nurse or radiographer will explain how to use the dilators.

After radiotherapy treatment the vagina can become dry. This can feel sore and uncomfortable especially during sexual intercourse. You may find that using a water-based lubricant before having sexual intercourse helps. The radiographer or nurse who provides you with the dilators will be able to provide guidance on the recommended lubricants.

Radiation induced cancers

There is always the risk that being exposed to radiation may in the future cause a new cancer within the treatment area. However the risk of a second cancer developing is so small that the benefits of the treatment far outweigh the risks. Your Doctor will discuss this with you.

The treatment rooms are monitored during your preparation for treatment, positioning and treatment delivery by television cameras. This is part of ensuring the accuracy of your treatment and your safety and wellbeing in the rooms at all times. We assure you that the camera feed is live and it is not possible to make a recording. The images are viewable on screens situated in the machine control areas. The control areas are only accessed by authorised radiotherapy staff, some of whom may not be directly involved in your care at that time. If you have any concerns about your privacy or dignity, that you have not already discussed then please do not hesitate to highlight your concerns during the information discussion with the radiographers at your first treatment appointment.

Who do I contact if I have any questions or concerns?

You will have a follow-up appointment with your doctor approximately 6–8 weeks after you have completed your treatment.

If you have any questions regarding the information that has been given to you, please do not hesitate to ask your doctor or any of the radiographers for advice.

The radiographers can be contacted on **0121 3715086** on a Tuesday and Thursday or **0121 371 3556** on a Monday, Wednesday and Friday morning.

You may also find these organisations helpful:

Macmillan www.macmillan.org.uk or **0808 808 0000**

The Daisy Network www.daisynetwork.org.uk

Radiotherapy

Queen Elizabeth Hospital Birmingham
Mindelsohn Way, Edgbaston
Birmingham, B15 2GW

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