The Radiotherapy Department

Intra-uterine brachytherapy for gynaecological cancer

Information for women
You have been given this leaflet as you have been recommended brachytherapy as part of your treatment for your gynaecological cancer. By giving you some idea of what to expect we hope to ease some of the worries you may have. Family members and friends may also find it helpful.

This leaflet is detailed, but is intended as a guide only. The brachytherapy radiographers and your doctor will have already talked to you about this treatment.
What is brachytherapy?

Brachytherapy is a form of radiation treatment, given from inside the body. Some people refer to it as ‘internal treatment’. Small tubes or ‘applicators’ are put inside your body and then a very small radioactive pellet or ‘source’ is put inside the applicator. This allows us to give a high dose of radiation to the tissue close to the source, without adding a large dose to the other tissues in your pelvis.

Why do I need to have brachytherapy?

In addition to the radiotherapy you are having, we need to give a further dose of radiation just to your cervix and/or the top of your vagina. By using brachytherapy we are able to position the treatment directly on this area.

Brachytherapy procedure

You are likely to have four treatments. These are spread over two weeks (two the first week and two the second week).

You will be admitted to hospital for this procedure and will need to remain in your hospital bed for the duration of your treatment (two days). You will be admitted via TDA (theatre direct admissions) on the morning of your first treatment each week.

Week one

On the morning of your first treatment you will be taken to the operating theatre, where you will be given a general anaesthetic. This means that you will be asleep (unconscious) during the procedure.

The doctor will examine you internally, then insert the applicators into your cervix and/or womb. They will place soft gauze packing into your vagina to keep the applicators in the correct
position. You will also have a urinary catheter (a narrow plastic tube) inserted into your bladder, as you will not be able to leave your bed during the rest of the treatment. The applicators and catheter will remain in place whilst you are in hospital.

After you have recovered (woken up) from the anaesthetic you will be taken for an MRI (magnetic resonance imaging) scan and CT (computerised tomography) scan. You will then be transferred back to the ward to wait for your first treatment. During this time we will produce an individual treatment plan for you, using information from the scans and internal examination.

Later in the day you will be brought down to the radiotherapy department to have your first treatment.

You will have another scan the next day, before having your second treatment.

When both treatments are completed the applicators and catheter will be removed and you will be discharged home.

**Week two**

Your treatment will follow the same process as the first week.
How is the treatment delivered?

The source is attached to a wire which is housed in a small machine. When the treatment plan is ready, the radiographers will connect the brachytherapy tube to the applicators. When the machine is switched on, the wire and source travel into the applicators through the tube and give the treatment.

The radiographers will leave the room when you are ready to start the treatment. You will be asked to lie still and breathe normally. The radiographers will be watching you continuously on cameras from outside the room. If you need them to come back in just raise your hand.

You will not be able to feel the source moving or the treatment itself. The treatment will take between 15 to 20 minutes to deliver. When the treatment is over, the wire will travel back into the machine, where it stays until the next fraction is needed.

The machine will automatically switch itself off when the treatment is finished. The radiographers will then enter the room and disconnect the tubing.
Can I move while receiving the treatment?

While you are in hospital and have the applicators in place there are restrictions to how much you can move. You cannot completely bend your knees, sit up or roll onto your side. However, you will be able move your arms and upper body to get things off your side table. It is important to regularly do the exercises detailed on the following pages.

During this time you will be given painkillers through a special pump, called Patient Controlled Analgesia (PCA). This is connected to a cannula (narrow tube in one of your veins). You can control the amount of painkiller you receive, by pressing a button. This releases a set amount of medication into your body. The levels of painkiller are pre-set, so that you cannot have too much (overdose). Using the PCA will help you to be as comfortable as possible during your stay in hospital.

When the treatment is finished and you are ready to go home, a nurse will help you to get up out of bed. You should take your time getting up as this gives your body a chance to adapt after lying flat. Please let the nurse know if you feel lightheaded.
Exercises

During any period of inactivity, blood flow through the veins is decreased. You will be lying still for a long period of time, so it is important to carry out regular exercises. This stimulates your circulation, helping to prevent deep vein thrombosis (DVT) in your legs.

A DVT is caused by a blood clot forming in a vein. It is potentially life threatening if it moves, and could cause a blood clot in your lungs (a pulmonary embolism or PE).

We will give you elasticated stockings to wear during your treatment, as well as an anti-blood clot injection. We also recommend the following gentle exercises:

1. Point your toes towards the ceiling, then gently point them away. Repeat 10 times with each foot.
2. Bend your knee so that it lifts 10cm (3 inches) off the bed, then slowly straighten. Repeat 10 times with each knee.
3. With both legs straight, push your knees into the bed and hold for a count of 4, then relax. Repeat 10 times.
4. Shrug your shoulders up and down 10 times.
5. Pull your shoulders forwards then push them backwards 10 times.
6. Circle your shoulders 10 times (either forwards or backwards).
7. Put your hands on your shoulders and circle your elbows 10 times, then change direction for another 10 times.
8. With your arms stretched out and hands together, lift your arms above your head and slowly lower. Repeat 10 times.
9. Take a deep breath in and hold for a count of 5, then gently release. Repeat 5 times.

Please ask the nurse caring for you if you need any help with these exercises.
Will I be able to eat and drink?

It is important that you eat and drink during your stay in hospital. You will not be able to sit up to eat, so try to choose food that is easy to eat whilst lying reasonably flat. You will be served food from the restaurant trolley that visits the ward at meal times.

Straws will be available for your cold drinks and hot drinks will be served in a beaker. You must drink plenty of fluids during your stay on the ward and for a few days afterwards, as this will help to prevent urine infections.

Please tell the nurse if you have difficulty eating and drinking whilst lying down.

What happens if I want to go to the toilet?

You will be given anti-diarrhoea medication to stop your bowels from working; usually loperamide. This will help prevent you from needing to use the toilet during your stay.

You will have a urinary catheter in place, which means that you won’t need to get out of bed to pass urine. This will be removed when the treatment finishes.

Are there any side-effects?

**Bowels**

Your bowels should start to work again once you stop taking the anti-diarrhoea medication. If you have been experiencing diarrhoea as a side effect of your radiotherapy treatment, this may happen again for a few days.

If your bowels do not start again within 3-4 days, increase your fibre intake (eat fruit, high-fibre cereals, wholemeal bread or pasta, etc.) to get them going. You may need to take a laxative (such as lactulose) to help get things moving. You can get this from your local pharmacy or on prescription from your GP.
**Bladder**
After the catheter has been removed, you will need to pass urine before we can discharge you from hospital. This is to make sure that you are able to pass urine and there are no issues from the catheter being in place.

You may experience a burning sensation when you pass urine. This will be helped by continuing to drink plenty of fluids. If the burning sensation increases, lasts more than three days or your urine develops an unpleasant odour, you may have developed a bladder infection. Please contact your family doctor who may prescribe antibiotics to treat the infection.

**Vagina**
After the treatment, the top of your vagina may become sore and inflamed. You may also experience an increase in vaginal discharge. To reduce any discomfort and help minimise the risk of infection, it is best to bathe or shower as normal and change sanitary towels regularly. Do not use tampons, feminine deodorisers, douches or talc, as they could cause discomfort and irritation and possibly encourage infection.

**Tiredness**
You could feel quite tired or have less energy than usual, both during and after this treatment. This is completely normal. Try to rest and gradually build up to your normal activities as you feel able to.

You may also feel ‘stiff’ after lying in the same position for so long; take your regular painkillers, if required.

**Nausea**
There is a small chance that you might experience some nausea (feeling sick), but this is usually as a result of eating in a semi-lying down position, rather than the treatment. Try to eat small amounts regularly and choose foods that are easy to swallow.
What are the long-term risks?

When the vaginal tissues heal themselves, small scars and adhesions (areas of tissue that have become connected) can form. The muscles supporting the vagina can also become hardened, causing them to lose their flexibility. This may result in your vagina becoming ‘tighter’ and shorter. This can make vaginal examinations in follow-up clinics and sexual intercourse more difficult and uncomfortable. You will be given vaginal dilators during your treatment, to help prevent the scars and adhesions forming and to keep your vagina as supple as possible.

The treatment can also affect the cells that produce the natural lubricant in your vagina. This can cause a ‘dry’ or unpleasant feeling which can make sexual intercourse uncomfortable. This may be helped with the use of a vaginal moisturiser and/or lubricant.

Small blood vessels can develop on the surface of the vagina, which can occasionally bleed. This may happen after using the dilators, intercourse, or a vaginal examination. It is usually nothing to worry about, but if you have any concerns or unexpected bleeding please contact either your gynaecological oncology nurse practitioner or your family doctor.

You may find the Macmillan booklet ‘Sexuality and cancer’ useful. Please ask a member of the treatment team for a copy.
Follow-up arrangements

Telephone call
A radiographer will telephone you at home about two to three weeks after your course of brachytherapy has finished, to check your progress.

Hospital appointment
You will also have follow-up appointments at the hospital where you first saw your oncologist. The first of these will usually be four to six weeks after your last treatment. This appointment will be sent to you by post. It is at this appointment that your doctor will assess and discuss your progress, ask you about any continuing side effects and plan future appointments.

You will then be seen at regular intervals for the next five years. At these appointments the doctor will ask you questions about your general wellbeing and specifically about your bowel and bladder functions. They will feel your abdomen and do an internal examination. They will also discuss any future decisions about your care.

If you have any questions, remember to write them down and bring them to the appointment.

Will I have any scans or tests after the treatment has finished?
A scan may be done a few months after you complete your radiotherapy. It is not usually carried out straight away, as your body needs to recover from the treatment first. Your doctor will decide at future appointments whether any more scans or tests need to be done.
Who do I contact for advice once my treatment has finished?

For routine advice and queries up until your first follow-up appointment, please contact a member of the treatment team (as shown below). For urgent enquires, contact your family doctor.

After your first follow-up appointment, please contact your gynaecological oncology nurse practitioner or your family doctor.

How to contact us

**During normal working hours:**
- Brachytherapy radiographers 01865 226 289
- Consultant gynaecological radiographer 01865 227 213

**Out of hours:**
- Oxford triage assessment team 01865 572 192

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALSJR@ouh.nhs.uk**