Intrauterine brachytherapy
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Your treatment
You and your oncologist have decided that a course of brachytherapy would be the most appropriate way of treating your cancer.

When recommending brachytherapy, your doctor will have taken into account the risks and benefits of the treatment. Although there will be side effects, it is felt that the advantages for you outweigh the disadvantages.

The risks of receiving intrauterine brachytherapy to the cervix are outlined in this leaflet.

You may decide that you do not want to have brachytherapy – this is an option for you to consider. In this case, you might want to talk again with your doctor and let them know what you have decided.

You can request a second opinion on your diagnosis or treatment at any time during your consultation or treatment process. Please speak to your clinical oncologist or GP for information on how to do this.

Your key worker........................................................................................................

Their contact number..............................................................................................

Consent – asking for your consent
We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves.

If you would like more information about our consent process, please speak to a member of staff caring for you.
Patient pathway

Once you have consented (agreed) to brachytherapy treatment, the appointments will be booked and dates given to you for your treatment.

For every treatment (usually three in total), you will attend day surgery at 7.30am at St Thomas Hospital, ready for the insertion of the applicators procedure.

Once the procedure is done, a CT scan and a MRI scan will be performed before you are taken to the brachytherapy suite at St Thomas Hospital.

The treatment is planned by the consultant and the physicists which can take up to a few hours.

The treatment is delivered and the applicators and catheter are removed. You are then able to go home.

Once the three treatments are completed, you will be followed up in six weeks’ time by the consultant.
What is brachytherapy?

Brachytherapy is also known as internal radiotherapy. It uses a radioactive source (capsule) to treat cancer. This can damage all cells within the treatment area; killing the cancer cells but allowing your normal cells to recover. Side effects are generally isolated to the area you are having treated. Brachytherapy can focus radiation much more than external radiotherapy so the amount of normal tissue which it affects is much smaller. This means the brachytherapy machine can deliver a high dose of radiation to your cancer with less side effects.

Your treatment will take place in an area of the Radiotherapy Department called the brachytherapy suite. This treatment is normally given following external radiotherapy or chemo-radiotherapy.

What do I need to think about before brachytherapy starts?

Pacemakers – If you have a pacemaker, please tell your doctor as soon as possible. You will need to have a pacemaker check before (and possibly after) your brachytherapy treatment.

Pregnancy – All female patients under the age of 60 will be asked to confirm their pregnancy status before the first brachytherapy treatment. **It is very important that you are not and do not become pregnant while undergoing treatment.** If you think you may be pregnant at any time during your course of treatment, please tell your clinical oncologist or radiographer immediately. If necessary, please speak to your GP about contraception methods suitable for use during treatment.
How does brachytherapy work?
Applicators (hollow tubes) are inserted inside your vagina and uterus (womb). These are then connected to the brachytherapy machine. When treatment is started, a small radioactive capsule travels up inside the applicators to where treatment is needed.

Once the required dose of radiation has been given, the radioactive capsule automatically returns back to the brachytherapy machine.

Your treatment is carefully designed for you, depending on your type of cancer and size of tumour. Previous treatment or surgery that you may have had will also affect the treatment you receive. Treatment times can vary, as can the type of applicators used.

Who will look after me during my treatment?
A number of healthcare professionals will be involved in your treatment and care. Below is a list of all of the doctors, nurses, specialists and departments who will look after you while you are having brachytherapy.

Clinical oncologists are doctors who are trained in the use of brachytherapy. The consultant clinical oncologist will be in charge of your care. Clinical oncologists are supported by a team of specialist registrars, therapy radiographers, nurses and administrative staff.

Therapy radiographers are specifically trained to plan and deliver the brachytherapy. The radiographers will have day-to-day responsibility for you while you are receiving treatment.
Your **Advanced Practitioner Radiographer** will provide support and advice on brachytherapy side effects and their management.

Your **clinical nurse specialist (CNS)** will provide support and advice on all aspects of your treatment.

The **acute oncology assessment unit** will provide emergency medical care for any side effects of treatment or problems relating to the cancer itself (details at the end of this leaflet).

**Before treatment**

Brachytherapy treatment is given over three sessions, usually over one week. The same procedure is carried out each time.

You will need to come to the outpatients department the day before your treatment for a clinic appointment, but you will not need to stay in overnight.

The doctor may examine you to make sure you are able to have the treatment. You will have a blood test before you see the doctor. Your results will be reviewed to see if we are able to go ahead with the procedure.

The doctor will give you a prescription for suppositories for you to use the night before the treatment to empty the bowel. This prescription will need to be collected from the on-site pharmacy.

You should not eat or drink from midnight the night before the brachytherapy. If you take any medicines, you should take your usual dose with a small sip of water before 6am on the day of the brachytherapy, unless otherwise instructed by your doctor.
Bring some lunch with you and any regular medication that you are taking

It is also advisable to bring a book, DVD player, music or magazine to help you to relax during the day.

You may bring a relative or friend to wait with you during the day, or they can collect you once the procedure has finished.

**Inserting the applicators**
The insertion will be done in the day surgery unit. The anaesthetic nurses will get you ready for the procedure when you arrive.

Your doctor will see you again on the morning of the procedure in the Day Surgery Unit.

The anaesthetist will explain the anaesthetic procedure to you. A spinal anaesthetic is usually given, however sometimes a general anaesthetic will be used instead.

A spinal anaesthetic involves an injection into your spine to numb the area. You will not feel any pain once the anaesthetic has worked, but you will be awake during the procedure. You may be given sedation to help you relax.

If a general anaesthetic is used, you will be asleep. The anaesthetist will wake you up once the procedure is finished.

The procedure normally takes about 30 minutes.

The applicators are inserted into your uterus (womb) and vagina. Some gauze ribbon is also used (often called packing) to help to keep the applicators in place.
It is very important that the applicators do not move, so you will need to remain lying down, as still as possible during the procedure and throughout the treatment. If necessary, the treatment staff will raise your head so that you can drink and eat, but you will not be able to sit up or lie on your side.

You will have a catheter in your bladder so that you do not need to go to the toilet to pass urine. If you feel that you need to empty your bowels it is important that you let the radiographers or nurse know straight away.

Some patients have some discomfort for several hours after the applicators are inserted, or lower back pain from lying still. It is very important that you tell the nurse or radiographers if you have discomfort or pain. They can easily relieve this by giving you pain medication.

**Following the insertion of the applicators**

After the procedure you will have a computerised tomography (CT) scan and a magnetic resonance imaging (MRI) scan. Before your MRI scan you may be given some medication to reduce any bowel movements. The radiographers will discuss this with you. The scans allow your doctor to check the position of the applicators and carefully plan your treatment. Once you have had your scans it may take several hours for the plan to be completed and your treatment given. You will wait in the brachytherapy suite, under the care of the radiotherapy nurses and radiographers. Any visitors may wait with you. The nurse looking after you will monitor you during the course of the day and make sure you are comfortable. You can eat and drink while you wait for your treatment.
The treatment

When the treatment is ready, you will be taken into the treatment room and the tubes inside your vagina and uterus will be connected to the brachytherapy machine. The treatment is not painful and will take about 20 minutes.

When the treatment starts, the machine will make small mechanical noises; do not be alarmed, this is normal. **While treatment is being given no one will be allowed to enter or stay in the room.** This is to prevent others from receiving an unnecessary dose of radiation.

The radiographers will monitor you via a video camera in the room. You will be able to call the radiographers and speak to them at any time during your treatment through an intercom system.

When your treatment has finished the radioactive capsule automatically goes back into the machine and you will no longer be receiving any radiation.

**You are not radioactive after treatment finishes. It is safe to be around family and friends.**

Removing the applicators

You will be given pain medication before the applicators are removed.

You will also be able to use Entonox® (gas and air) to help you relax and ease any discomfort while the applicators are being removed.

The vaginal packing and the applicators will be removed by the radiographers as soon as the procedure has finished. The catheter will also be removed, and you will
need to pass urine before you go home. You will be able to go home the same day as your treatment.

You will be required to attend the radiotherapy clinic and have a blood test the day before each procedure.

After your final treatment, the radiographers treating you will make sure that you have a follow-up appointment to come back to the oncology clinic following your treatment.

What are the side effects of brachytherapy?
Receiving brachytherapy does have side effects. The most common side effects are listed below and are grouped into short-term and long-term effects. Your clinical oncologist will have discussed these effects with you as part of your consent to treatment. You can ask someone in your treatment team at any point if you would like clarification of these side effects.

While we cannot prevent side effects, we can help you to manage them. Side effects that occur during your brachytherapy are called early (or acute) side effects.

The potential complications of the procedure are infection, bleeding and uterine perforation (where one of the tubes is placed outside of the uterus). These risks are very small.

Possible early side effects
Tiredness – A sense of fatigue and a lack of energy may occur, but will slowly settle once treatment is completed. Having internal radiotherapy alone should not cause severe tiredness.
Diarrhoea/Urgency – Stools may become very loose and there may be a need to open bowels more urgently. If this becomes a problem, medication can be taken to control it.

Cystitis – Cystitis is a burning feeling and the need to pass urine frequently when the bladder becomes irritated and uncomfortable. This can happen after internal radiotherapy. If it does, try to drink as much water as you can, at least six to eight glasses a day. If these symptoms persist you should contact your doctor. You may have a urine infection and the doctor may need to prescribe a course of antibiotics for you.

Vaginal soreness – The inside of the vagina may be sore for seven to ten days following treatment. If you have had external radiotherapy you may still have a skin reaction from it. Continue to look after your skin as you were advised.

Vaginal discharge and/or bleeding – Discharge and bleeding may occur for up to four weeks after treatment. If this persists contact the gynaecology team.

Possible late side effects (from six months after treatment)

Change in bowel habits – There may be a need to open bowels more urgently, especially in the morning. Bowel movements can become more frequent, two or three times a day instead of once. There may be blood in the stools.

Reduced bladder volume – The bladder may reduce in size and urine may need to be passed more frequently. Rarely there may be blood in the urine.
Vaginal Dryness – The inside of the vagina may feel dry, and intercourse may also be uncomfortable. Using a lubricant may help. Please seek further advice from the gynaecology team.

Narrowing of vagina – The vagina may become narrower and shorter. This may be prevented by the use of dilators. How to use these will be discussed at the end of your brachytherapy treatment.

Uncommon, serious side effects
Severe narrowing of the bowel – This may cause a blockage which may require surgical correction and a colostomy.

Severe ulceration of the bladder or vagina – This may lead to the formation of a fistula or false passage between the vagina and bladder or the vagina and bowel. It may require surgery and a colostomy.

Sexuality
It is normal for some women to feel different about themselves once they have been given a diagnosis of cancer and especially following internal radiotherapy. These feelings for some women are short lived, for others it can be one of the most challenging impacts of treatment.

You may feel:
• nervous about resuming intimacy with your partner following treatment
• that you no longer desire intimacy or have difficulty becoming sexually aroused
• concerned about the impact your cancer and its treatment will have on you in the future.
Please speak to your clinical nurse specialist or your doctor about these concerns. They are familiar with talking about these topics and are happy to discuss it with you. Macmillan produces a booklet **Sexuality and cancer** which you may find helpful and is available for free. Their contact details are at the end of this booklet.

You cannot give your partner cancer during sexual intimacy or make them radioactive in any way.

**After treatment**
The side effects from the brachytherapy can continue after the treatment is complete. Any side effects that you have may continue to get worse in this period and if you have not had any you may develop them. After about a month the majority of these side effects will start to subside.

You will be given an appointment to come back to see the doctor in six weeks. However, if you have any questions or concerns before this you can contact your clinical nurse specialist or radiographer

**Coping with gynaecological cancer**
A diagnosis of a gynaecological cancer may bring specific concerns. These may include coping with personal relationships, talking about your diagnosis and continuing with social and work engagements.

You may feel unable to cope with what is happening to you and feel anxious or depressed. It can be helpful to know that these feelings ease with time.

Discussing your concerns with any of the medical staff, nurses as well as your family and friends, is important as it may help you to find answers to some of your questions.
You may find that you need a little extra help to come to terms with the problems that cancer can cause. If you feel that you would benefit from some support we can refer you to Dimbleby Cancer Care.

**Gynaecological cancer support group**
There is a drop-in support group for people with gynaecological cancers. It is an informal and relaxed group providing the opportunity to meet other people and share your experiences.

It is held on the first Tuesday of each month, from 1:30pm to 3pm at Dimbleby Cancer Care, 2nd Floor, Gassiot House, St Thomas’ Hospital. There is no cost or commitment to attend. If you would like to come, just turn up. For more details contact, t: 020 7188 5918.

**Commonly asked questions**
**When can I go on holiday?**
You can go on holiday as soon as you feel well enough.

**When can I go back to work?**
Some patients continue to work throughout their brachytherapy treatment, while others may feel they need a few weeks break before returning. If you have had a long break from work it may be advisable to plan a phased return, where you work shorter hours at first.

**Additional information**
In order to improve treatments and services, audits are regularly carried out in the department. This can involve using patient notes. Any data collected will have all personal and identifiable details removed to ensure patient confidentiality. However, if this is unacceptable to you, and you would prefer that your notes are not seen, please let your consultants know and your wishes will be respected.
Clinical trials are undertaken within the department, which you may be eligible to take part in. If necessary and appropriate, your doctor will discuss this with you.

**Useful sources of information**

**Macmillan Cancer Support**
If you have any questions about cancer, need support, or just want to chat, call the free Support Line.
**t:** 0808 808 0000, Monday to Friday, 9am to 8pm
**w:** [www.macmillan.org.uk](http://www.macmillan.org.uk)

**Cancer Research UK**
**t:** 0808 800 4040
**w:** [www.cancerhelp.org.uk](http://www.cancerhelp.org.uk)

**Gynae C (gynaecological cancer support)**
**t:** 01793 491 116
**w:** [www.gynaec.co.uk](http://www.gynaec.co.uk)

**Jo’s Trust (cervical cancer)**
**t:** 020 7936 7498
**w:** [www.jotrust.co.uk](http://www.jotrust.co.uk)

**Ovacome (ovarian cancer)**
**t:** 0845 371 0554
**w:** [www.ovacome.org.uk](http://www.ovacome.org.uk)

**Vulval Awareness Campaign Organisation**
**t:** 0161 747 5911
**w:** [www.vaco.co.uk](http://www.vaco.co.uk)

**The Daisy Network (premature menopause support)**
PO Box 183, Rossendale, BB4 6WZ
**w:** [www.daisynetwork.org.uk](http://www.daisynetwork.org.uk)
Contact us
Radiotherapy reception, t: 020 7188 7188 (ext 57542 or 57569)
Radiotherapy bookings, t: 020 7188 3160
Radiotherapy treatment support team, t: 020 7188 4220, Monday to Friday, 8.30am to 5.30pm
Acute oncology assessment unit t: 020 7188 3754, Monday to Friday, 9am to 6pm

Out of hours oncology doctor on call
If you require assistance out of hours, please phone the hospital, t: 020 7188 7188 and ask them to contact the oncology doctor on call. Please have your hospital number ready. The switchboard operator will take your details and ask the doctor to phone you back.

If you are concerned, please go to your local Emergency Department (A&E).

Guy’s and St Thomas’ hospitals offer a range of cancer-related information leaflets for patients and carers, available at www.guysandstthomas.nhs.uk/cancer-leaflets. For information leaflets on other conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets
Pharmacy Medicines Helpline
If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748
9am to 5pm, Monday to Friday

Your comments and concerns
For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.
t: 020 7188 8801 (PALS) e:pals@gstt.nhs.uk
t: 020 7188 3514 (complaints) e:complaints2@gstt.nhssss.uk

Language and accessible support services
If you need an interpreter or information about your care in a different language or format, please get in touch.
t: 020 7188 8815 e:languagesupport@gstt.nhs.uk

Dimbleby Cancer Care provides cancer support services for Guy’s and St Thomas’. We have a drop-in information area staffed by specialist nurses and offer complementary therapies, psychological support and benefits advice for patients and carers.

Dimbleby Cancer Care is located in the Welcome Village of the Cancer Centre at Guy’s. t: 020 7188 5918 e: DimblebyCancerCare@gstt.nhs.uk