

Internal radiotherapy to the female pelvis (Full Insertion Technique)

Radiotherapy Department



Patient information leaflet

What does this leaflet cover?

Introduction	3
Who is this leaflet for?	3
Who will I meet during my internal radiotherapy (HDR)?	4
What is internal radiotherapy (HDR) and how does it work?	5
What are the alternatives to radiotherapy treatment?	5
Preparation for HDR treatment	6
First day of HDR treatment	7
Full insertion technique	8
What sort of side effects might I have, and for how long?	10
What happens when treatment ends?	13
Where can I find further support?	14
Contact numbers	15
Additional information	16
Questions and notes – for you to write down any comments or questions you may wish to ask when you visit the hospital.	18

Please see the department's website for additional information. The site also provides information on recent patient surveys carried out in the department and any actions arising from the results.

www.royalsurrey.nhs.uk/st-lukes-centre

St Luke's Cancer Centre

Please be aware that St Luke's Cancer Centre has two radiotherapy departments. One is located at the Royal Surrey County Hospital in Guildford and the other at East Surrey Hospital in Redhill. Please refer to your appointment letters for the location of all your appointments. All information contained in this leaflet is relevant to both sites.

Introduction

Your clinical oncologist has decided that a course of radiotherapy would be the most appropriate way of treating your cancer. When recommending radiotherapy, your doctor takes into account the risk of the cancer returning or growing if no radiotherapy is given. While the treatment may have some side effects, it is felt that the advantages for you would outweigh the disadvantages.

At this stage your clinical oncologist will probably have discussed with you the risks and benefits of undergoing a course of radiotherapy and you may have been presented with a consent form to sign agreeing to have the treatment.

The short and long term risks of receiving internal radiotherapy to your pelvis are outlined towards the end of this leaflet.

Who is this leaflet for?

This leaflet is specifically for patients having radiotherapy to the uterus (womb), vagina or cervix using what is known as the Full Insertion Technique.

Figure 1 shows the anatomy of the area.

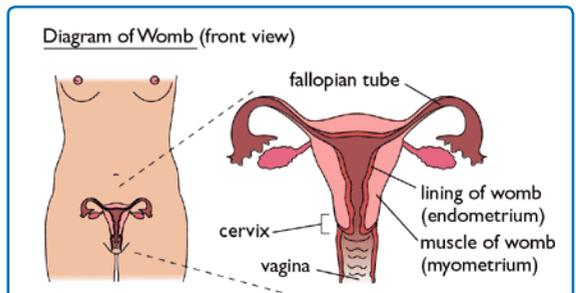


Figure 1 (courtesy of Cancer Research UK)

You may also be having some external beam radiotherapy too. If so, you will be given a separate leaflet about this part of your treatment.

Please be aware that your treatment will be tailor-made for your specific needs. It may differ slightly from what is described in this leaflet, and also from what another patient with a similar diagnosis may be having.

You will have an opportunity to talk with a radiographer before your first treatment. You may also ask to see your doctor or clinical nurse specialist if you wish.

Who will I meet during my internal radiotherapy?

- **Clinical Oncologist:** your doctor will perform all the internal treatments. You will usually have a clinic appointment to see your doctor before you come for your internal treatment. This is to ensure you know what to expect and to give you time to ask any questions you may have.
- **Clinical Nurse Specialists (CNS):** you will normally have met your CNS before you come for your internal treatment. You will then have an appointment during or after the treatment when the CNS will discuss with you any specific gynaecological issues that have arisen and give you and your family time to ask any question you may have. If you are a private patient you will see one of the review radiographers instead of the CNS.
- **Therapy Radiographers:** they will be present during your treatment. They operate the machine being used to treat you. They are also there to provide support and reassurance for you during the treatment.
- **Medical Physicist:** they may be present during your treatment, usually outside the treatment room. They provide radiation dose information.

- **Nursing Staff:** as you are to have an anaesthetic you will be admitted to the ward on the day of each internal treatment. You will return to the ward to recover once the treatment is finished. A member of the nursing staff will look after you while you are on the ward.
- **Theatre Sister:** will be present throughout and will help you recover once the procedure is complete.
- **Anaesthetist:** he/she will put you to sleep for the procedure and look after you as you wake up once the treatment is completed.
- **Operating Department Practitioner:** assists the anaesthetist while you are asleep and looks after you as you wake up once the treatment is completed.

What is internal radiotherapy and how does it work?

Internal radiotherapy is often referred to as HDR (high dose rate) radiotherapy. The way HDR radiotherapy works at St Luke's Cancer centre is by bringing a source of radiation, Iridium-192, very close to the tumour or tumour bed. This allows a high dose of radiation to be given, without giving a similarly high dose to the surrounding healthy tissues. This helps to reduce any side effects experienced. It is normally necessary to have a spinal or general anaesthetic when you undergo each HDR treatment. You will therefore be admitted to a ward on the morning of each HDR treatment.

What are the alternatives to radiotherapy treatment?

You may decide that you do not want to have radiotherapy; this is an option you can choose. If you wish to discuss this further please make an appointment with your doctor as soon as possible.

You may 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.

Preparation for HDR treatment

You will be seen by a specialist HDR therapy radiographer a few weeks before your HDR treatment is due to take place. This is to explain the procedure to you and answer any questions you may have. It may be useful to have a family member or friend to accompany you to this appointment. You will be given an appointment for a pre-clerking clinic. Here you will be seen by a nurse who will check you are fit enough to undergo the HDR treatment and anaesthetic.

This is a routine safety check and does not imply there are extra things wrong with you.

The admissions department will send you a letter about 1 week before your treatment. This will contain details of your admission date and times. It will tell you where you are to be admitted to (usually the Day

Surgery Unit). As you are to have an anaesthetic, the letter will also contain details of what and when you may eat and drink on that day. There will also be instructions for you to telephone the ward to check bed availability.

All female patients under the age of 55 will be asked to confirm their **pregnancy status** when they attend for treatment. While you are undergoing any form of radiotherapy it is very important that you **are not** and **do not become** pregnant. If you think you may be pregnant at any time during your course of treatment please tell your clinical oncologist, radiographer or member of the nursing staff immediately. If necessary please speak to your doctor about contraception methods suitable for use during radiotherapy. It is important to carry on using contraception for one year after your treatment has finished. This applies even if you have been told you will be unable to become pregnant following this radiotherapy. The treatment can cause damage to your eggs which could result in abnormalities arising in any child conceived. Therefore it is important not to become pregnant during this time. Please feel free to discuss this with your clinical oncologist.

First day of HDR treatment

- When you arrive on the ward you will be booked in and allocated a bed. The nursing staff will go through a series of questions with you to check that it is OK for you to go ahead with the anaesthetic.
- The anaesthetist will normally see you once you're in the radiotherapy department.
- You will be taken down to the radiotherapy department.
- The radiographers will introduce themselves to you and check your name, address and date of birth.
- The radiographer will re-confirm your consent for this HDR treatment, to ensure that you still agree to proceed.
- The anaesthetist will put a needle into your hand to allow the anaesthetic drugs to be administered.
- You will receive either a spinal or a general anaesthetic. The decision will be made by the anaesthetist.
- For a spinal anaesthetic to be administered you will need to be sitting up or lying on your side. You will be given sedation and pain relief.
- A general anaesthetic is administered with you lying on your back.

Full Insertion Technique

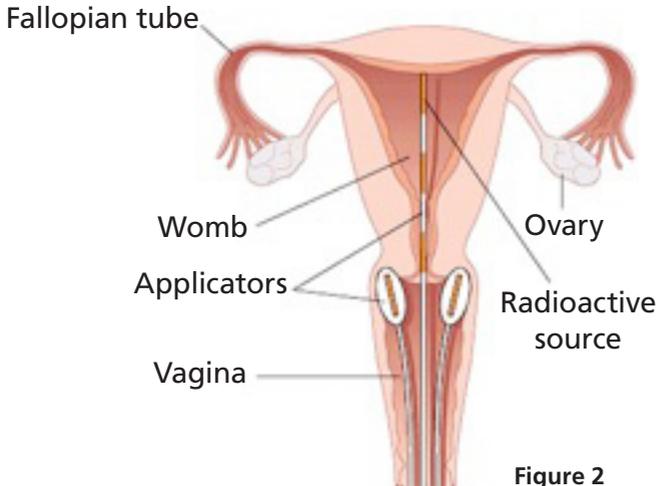


Figure 2

- Once the anaesthetic has taken effect your legs will be put up into stirrups.
- Your clinical oncologist will examine you to ensure it is safe and appropriate for you to go ahead with the treatment.
- A catheter will be inserted into your bladder.
- Your cervix will gradually be dilated until a tube can be passed through it into your uterus (womb).
- The doctor will insert 3 applicators into your vagina. One goes through the cervix into the uterus, and the other two rest adjacent to the cervix. Figure 2 shows vagina and uterus with the applicators in place.
- Some patients will also have plastic needles inserted into the applicator at this point, depending on the size of the cervix and the position of your bladder and bowel in the pelvis.
 - The needles can cause some complications such as bleeding or infection therefore the doctor will give you tranexamic acid and some antibiotics.

- Your clinical oncologist will then pack some gauze into your vagina. This is to move the applicators away from your rectum and bladder. It also helps keep the applicators secure.
- You will then be taken to the radiotherapy CT scanner to have a quick scan. This is so the clinical oncologist can check the positioning of the applicators. On your first treatment you may also have a MRI scan.
- You will return to the HDR suite to recover from the anaesthetic.
- You will remain there lying flat for about an hour while a customized radiotherapy plan is made for you.
- Many patients sleep during this time but you will be able to chat to the staff and eat and drink if you want to.
- The medical physics team will plan and check your treatment.
- Once the treatment plan is ready you will be returned to the HDR suite and the applicators will be connected to the treatment machine.
- Treatment duration varies but is usually around 15-25 minutes.
- You will be alone in the treatment room, but with the aid of CCTV the radiographers will be able to observe you.
- Once treatment is finished the clinical oncologist will remove the gauze and applicators.
- You will need to have someone to collect you from the hospital and stay with you for 24 hours after your anaesthetic.

What sort of side effects might I have, and for how long?

Short-term side effects arising from HDR treatment tend to be limited as the radiation dose is mainly confined to a small area. But they may occur. However, if you have received a course of external beam radiotherapy to your pelvis you may experience the side-effects relating to that treatment.

If you have problems with any of the side-effects listed below and you are worried please feel free to contact the radiographers who treated you (via telephone number for radiotherapy reception) or your clinical nurse specialist. Telephone numbers are listed at the end of this leaflet.

You will also have an opportunity to discuss these side-effects at your follow-up appointment. Side effects arising from HDR treatment are listed below. They may appear soon after your first HDR treatment.

- **Bleeding from your vagina:** you may experience slight bleeding or discharge from your vagina. This should clear up a few days after HDR treatment has finished. If it does not resolve please tell your clinical consultant at your follow-up appointment. If this appointment is not for some time or the bleeding is heavy please see your GP. If the discharge is itchy or smelly you may have an infection. Please see your GP.
- **Bladder discomfort:** you may find that you have to pass urine more frequently and more urgently than usual. You may need to get up several times in the night. You may also notice a small amount of blood in your urine. To help minimise these effects please drink about 2.5 litres of fluid each day. Please avoid large quantities of tea, coffee, alcohol and citrus fruit juices as these can irritate your bladder and increase your bladder side-effects.
- **Changes in bowel habits:** some patients experience the need to have bowel movements more frequently and with a greater urgency than usual. You may find that you have some diarrhoea, stomach cramps and wind. It may become uncomfortable to open your bowels and you may also notice some blood. If you wish you may take a tablet called Loperamide. This will help with any diarrhoea you may have. You can buy this medication over the counter at most pharmacies: follow the instructions on the packet. It is important to drink the recommended amount of fluid each day. This helps to replace any fluids lost through diarrhoea.

Bladder and bowel problems should begin to improve 3-4 weeks after your last HDR treatment or external beam radiotherapy. If they do not, please speak to your clinical oncologist at your follow-up appointment. If your symptoms are very acute and your appointment is some time away please contact a radiographer or your clinical nurse specialist.

- **Tiredness:** it is quite common to feel more tired than usual after having HDR radiotherapy. As the treatment can make you dehydrated, drinking the recommended 2.5 litres of fluid per day can help with this. Rest if you need to, but if you feel OK carry on with all your normal daily activities

Long term risks

Long term side effects can occur several months to years after the radiotherapy has finished. Once your radiotherapy has ended you will initially have regular follow-up appointments with your consultant and you will be carefully monitored for any signs of these long-term effects. It may be useful to keep a note of your side effects during and after your radiotherapy so they can be more easily monitored.

Please remember that late effects of treatment only happen in a small number of patients who have received radiotherapy.

- **Infertility:** radiotherapy to the pelvis permanently affects the ovaries. This unfortunately means that after your treatment you will not be able to have any children. This may be very distressing for you if you have not yet had children or have yet to complete your family. You may wish to speak to your doctor before you come for your pre-treatment planning appointment to discuss this very important issue. Support services and contact numbers can be found at the end of this leaflet.
- **Bowel toxicity:** very occasionally a few patients find that loose bowel movements or diarrhoea persists even though radiotherapy has been finished for some time. It may continue to be painful to open your bowels. There may also be some blood evident on opening your bowels. It is very important to tell your doctor about any bleeding you experience. You may require further investigations to rule out any other cause for the bleeding. Bowel problems can usually be treated with medication, but may require other interventions. In a very small number of cases an operation may be needed to remove the small section of damaged bowel.

- **Bladder problems:** very occasionally a few patients find that urinary frequency persists even though radiotherapy has been finished for some time. It may be painful to pass urine. There may also be blood evident on passing urine. It is very important to tell your doctor about any bleeding you experience. You may require further investigations to rule out any other cause for the bleeding. Bladder problems can usually be treated with medication, but may require other interventions.
- **Gynaecological problems:** the formation of scar tissue after radiotherapy can cause a narrowing or shortening of the vagina. Vaginal dryness may also occur. This can make sexual intercourse and future medical examinations uncomfortable. The problem can be managed with the use of lubrication and dilators. Please try not to be nervous about this as it is a very easy and comfortable procedure that you will be able to do for yourself at home. It is only necessary to start using dilators once the radiotherapy has finished. You will be seen by the gynaecological clinical nurse specialist or review radiographer to discuss this further. Vaginal narrowing/shortening can be reduced by continuing to have sexual intercourse during radiotherapy. This is obviously a personal decision to be made only if you feel comfortable doing so. If you do have sexual intercourse during your treatment it is important to use water based lubrication such as KY Jelly. It is important to use the dilators whether you are sexually active or not as their use will help make future medical examinations much more comfortable and accurate.
- **Menopause:** pelvic radiotherapy will often lead to an early menopause. This is different to a natural menopause because hormone levels change more quickly. Any symptoms may occur a few months after treatment. These may include hot flushes, feeling low, tiredness, anxiety, irritability, night sweats, vaginal dryness and loss of libido. There are a variety of treatments available to help minimise the effects of the menopause. You will have the opportunity to discuss this with the doctor and gynaecological clinical nurse specialist before or during your radiotherapy. There are also many useful websites and support groups, some of which are listed at the end of this leaflet.

- **Fistulae:** an extremely rare side effect of HDR treatment is the formation of a fistula (hole) between the vagina or uterus and the bladder or bowel. This may require surgery to divert the bladder or bowel on a temporary or permanent basis to allow the fistula to heal. The likelihood of this occurring may be higher if there is tumour present at the time when you undergo your HDR treatment (i.e. it has not all been removed by surgery first). Your doctor will explain this risk to you if you fall into that category.
- **Second malignancy:** treatment with radiotherapy can give rise to a second primary cancer. This would normally occur in the area of the body that had received the radiation. This is a very rare late effect and occurs years after radiotherapy has been administered.

What happens when treatment ends?

- On the last day of your treatment a radiographer will explain that the treatment will carry on working for another 2-3 weeks.
- The radiographer will make sure you have a follow-up appointment with your clinical oncologist. This may be at a hospital nearer to your home.
- You will be given a leaflet and two copies of your radiotherapy discharge summary. One copy is for your records and the other for you to give to your GP. In due course a letter summarising your treatment in more detail will be sent through the post to your GP.
- Please remember you are free to contact the department at any time after your treatment has finished should you have any concerns or questions. Contact numbers are at the end of this leaflet.

Where can I get further support?

Further support can be given by the various Support Centres at locations in Guildford, Crawley and Purley. These centres provide information, complementary therapies, support groups and one to one support. To find out more contact the individual centres or ask radiotherapy department staff for a leaflet.

The Fountain Centre is located in St Luke's Cancer Centre at Guildford.

- Telephone: 01483 406618
- Website: www.fountaincancersupport.com

The East Surrey Macmillan Cancer Support Centre is located at East Surrey Hospital.

- Telephone: 01737 304176
- Email: informationcentre.sash@nhs.net

The Olive Tree is located in Crawley Hospital, Crawley.

- Telephone: 01293 534466
- Website: www.olivetreecancersupport.org.uk

South East Cancer Help Centre is located in Purley, Surrey.

- Telephone: 020 86680974
- Website: www.sehc.org.uk

Please also see the department's website for additional information at

- www.royalsurrey.nhs.uk/st-lukes-centre

Other support websites and groups

Human Fertilisation and Embryology Authority

- Website: www.hfea.gov.uk
- Telephone: 0207 291 8200

The Daisy Network – Premature Menopause

- Website: www.daisynetwork.org.uk

British Association of Sexual and Relationship Therapy

- Website: www.basrt.org.uk
- Telephone: 0208 543 2707

Women’s Health Concern – Nurse Counselling Service

- Website: www.womens-health-concern.org
- Telephone: 0845 123 2319

Cancer Research UK

- Website: www.cancerresearch.org
- Telephone: 0808 800 4040

Macmillan Cancer Support

- Website: www.macmillan.org.uk
- Telephone: 0808 808 0000

Stop Smoking Service – Quit 51

- Website: www.quit51.co.uk
- Telephone: 0800 622 6968

Useful telephone numbers

Telephone numbers across both sites (Guildford/Redhill)

- Treatment Appointments 01483 571122 ext 6632
- Onslow Ward (out-of-hours) 01483 571122 ext 6858
- For urgent enquiries (out-of-hours) call hospital switchboard on **01483 571122** and ask operator to bleep on-call oncology SHO.

Guildford numbers

- Radiotherapy Reception 01483 406600
- Patient Support Office 01483 571122 ext 2066
- Clinical Nurse Specialist 01483 571122 ext 2038
- Oncology CT Scanner 01483 406630

Redhill numbers

- Radiotherapy Reception 01737 277311
- Oncology CT Scanner 01737 768511 ext 1202
- Patient Support Office 01737 277315
- Clinical Nurse Specialist 01737 768511 ext 6774

Additional information

- In order to continually improve treatments and services, audits are regularly carried out in the department. This can involve using patient notes. The notes will have all identifiable details removed to ensure patient confidentiality. However, if this is unacceptable to you please let your consultant know so your wishes can be respected.
- Clinical trials are undertaken within the department. If appropriate your doctor will discuss this with you.
- If you require this information in a different format or language please let a member of staff know as soon as possible.

- Staff at St Luke’s Cancer Centre cannot take responsibility for patient belongings brought into the hospital. Please keep all your personal belongings with you at all times. Please leave valuables at home.

If you wish to make a comment or complaint about any aspect of the treatment or services provided by St. Luke’s Cancer Centre and its staff please speak to a member of St. Luke’s. Alternatively you can visit, email, phone or write to the **Patient Advice and Liaison Service (PALS)**. Their contact details are:

PALS office in the main hospital reception area, telephone **01483 402757** or write to:

PALS Manager
Royal Surrey County Hospital NHS Trust
Egerton Road
Guildford
GU2 7XX

- **Email:** rsc-tr.pals@nhs.uk
- **Website:** www.royalsurrey.nhs.uk

You may also write to the Chief Executive of the Trust at:

Royal Surrey County Hospital NHS Trust
Egerton Road
Guildford
GU2 7XX

Key reference sources

- Internal Radiotherapy – Cancer Research UK 2017
- Radiotherapy Clinical Protocol – Procedure for Carcinoma of the Cervix Gynaecological Brachytherapy – Royal Surrey County Hospital NHS Foundation Trust 2016

Radiotherapy contact details

Radiotherapy reception

Telephone: 01483 406 600

PALS and Advocacy contact details

Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located on the right hand side as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

Telephone: 01483 402757

Email: rsc-tr.pals@nhs.net

Opening hours: 9.00am–3.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.

Past review date: July 2018

Future review date: July 2021

Author: Elizabeth West & Ciarna Brennan

PIN180725–1573

