



PATIENT INFORMATION

**A guide to
your HDR
brachytherapy
for cancer of
the cervix**

THE OTTAWA HOSPITAL

Disclaimer

This is general information developed by The Ottawa Hospital. It is not intended to replace the advice of a qualified health-care provider. Please consult your own personal physician, who will be able to determine if this information is appropriate for your specific situation.

This booklet was prepared by Lucie Grenier and Sandra Lowry, radiation oncology nurses in HDR brachytherapy, in collaboration with Drs. E and Samant and members of the oncology interdisciplinary team.

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Introduction

Welcome to The Ottawa Hospital Cancer Centre. You will be receiving high dose rate (HDR) brachytherapy treatment of the cervix.

The radiation oncology team has put together a clinical pathway to help plan your care. A clinical pathway outlines the tests, treatments, activities and teachings you will encounter during your brachytherapy experience. It is important for you to review the pathway so you can participate actively in your treatment and recovery. This plan of care can be adjusted based on your individual needs if necessary.

Please:

- Read the booklet carefully.
- Share it with your family/support person(s).
- Ask questions if there is anything you don't understand.
- Pack the booklet with your belongings and bring it with you when you come to the hospital.
- Fill out the survey at the end of the booklet and bring it with you at your next appointment. Your comments will help us to improve both patient care and the booklet.



Your Condition

You have been diagnosed with cancer of the cervix. Your oncologist has prescribed HDR treatment as part of the plan to treat your cancer.

This booklet has been developed to inform you and your loved ones about what to expect during your HDR treatment. Please read this information carefully and write your questions in the blank pages provided in this booklet.

The following page provides a brief overview of the brachytherapy experience. More detailed information will follow.

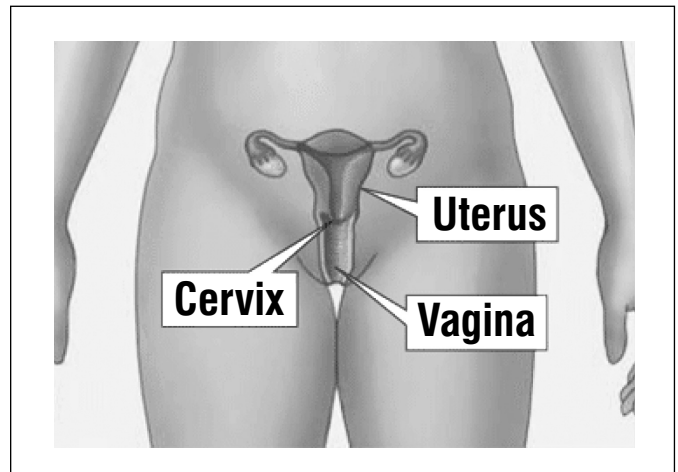
HDR Brachytherapy Treatment Overview	
What are our goals for this of this treatment?	<ul style="list-style-type: none"> • To deliver the radiation dose prescribed by the radiation oncologist • To provide you with comfort and support • To teach you about what to expect with regard to your treatment
Who will see me?	<ul style="list-style-type: none"> • Nurses, radiation therapists and doctors will see you at each HDR treatment. • You may also see one or more of the following team members: <ul style="list-style-type: none"> – Dietitian – Psychologist – Social Work – Advanced practice nurse
What tests will I have?	<ul style="list-style-type: none"> • Blood tests • Other tests (if needed)
What will happen?	<ul style="list-style-type: none"> • Before each HDR treatment we will: <ul style="list-style-type: none"> – assess you and take your vital signs – ask you to report your symptoms on the computer – review your symptom report and ask you questions about those symptoms and other treatment associated symptoms (i.e.: have you have any vaginal discharge)
What do I need to know?	<ul style="list-style-type: none"> • Your brachytherapy team will explain the HDR process and help you plan for the steps following your treatment. They will review with you things like: what to avoid, use and care of vaginal dilators, your discharge plan.
What activity can I do?	<ul style="list-style-type: none"> • Your brachytherapy team will encourage you to remain active and tell you what activities are best for you during treatment.

What to Expect at Each Treatment Appointment :

	Treatment #1	Treatment #2	Treatment #3
Tests	<ul style="list-style-type: none"> • Labs tests (i.e. blood work) 		
Treatments	<ul style="list-style-type: none"> • An intravenous (IV) will be inserted by the nurse • You will be taken into the treatment room by the nurse • The doctor will insert the tandem and ring (average 5 to 10 minutes) • An x-ray and scan will be taken to guide treatment planning (average 15 to 20 minutes) • The doctor and radiation therapist will plan your treatment (average 60 to 90 minutes) • Your treatment will be delivered (10 to 15 minutes) • You will recover after treatment (usually about 40 minutes or until medication has worn off) 		
Medications	<ul style="list-style-type: none"> • You will be given pain and anti-nausea medications • You may be instructed to take your own medications (if any) • You will receive oxygen during procedure 		
Activity	<ul style="list-style-type: none"> • You will need to be able to walk independently before going home 		
Nutrition	<ul style="list-style-type: none"> • Nothing by mouth before HDR treatment • Full fluids to regular diet after HDR treatment 		
Teaching and Discharge Planning	<ul style="list-style-type: none"> • The nurse will review the clinical pathway (this booklet) with you • The nurse will discuss the care and use of vaginal dilators with you • Discharge plans will be confirmed with your family member/support person 		

Female Anatomy

The **cervix** (or **neck of the uterus**) is the lower, narrow portion of the **uterus** where it joins with the top portion of the **vagina**.



What is HDR brachytherapy treatment?

- Brachytherapy is radiation treatment in which a radioactive source is placed next to or into a tumor using special applicators.
- HDR treatment is the delivery of a high dose of radiation over a short period of time.

Where will I get HDR brachytherapy treatment?

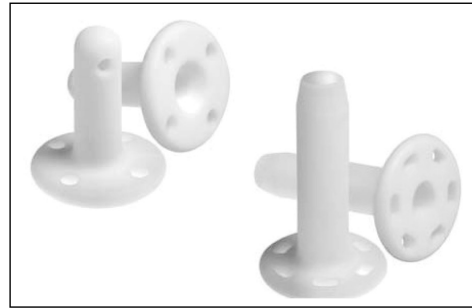
- HDR is given in the Brachytherapy Suite at the The Ottawa Hospital Cancer Centre, General Campus.

When will I get HDR brachytherapy treatment?

- HDR treatment is usually given when external beam radiation is completed (or towards the end external beam treatment).
- If your HDR brachytherapy treatment is scheduled before you have completed external beam radiation, you will not receive an external beam treatment on the day of your HDR treatment.
- Most women are scheduled for an HDR treatment once a week for three weeks.

Appointments before your HDR brachytherapy treatments

- You may have an appointment at the Pre-Admission Unit (PAU) to assess your overall health and your ability to tolerate anesthesia. Please bring all your medications with you (including over-the-counter medications, supplements, and health products). The nurse and/or anesthesiologist will tell you which medications to take and which to avoid prior to your treatment. Ask for the booklet called ***Examination Under Anesthesia (EUA)*** if you have not already received a copy.



The day before and day of each HDR brachytherapy treatment

- Eat your last meal the night before the treatment. **No solid food after midnight** before each treatment day.
- You can only have clear fluids up to **3 hours before** the HDR brachytherapy time.
- **Do not** smoke or drink alcohol for 24 hours before your treatment.
- Take your prescription medications as usual, with sips of water. If you are diabetic, please discuss your medication requirements with your brachytherapy.
- On the day of your HDR treatment, go to the Brachytherapy Suite C1609, at the Cancer Centre (The Ottawa Hospital – General Campus) or as instructed by your brachytherapy nurse.
- Please do not bring valuables to the hospital.
- HDR brachytherapy treatment usually last four to five hours.
- Please arrange for someone to come with you and take you home. **You will not be allowed to drive for 24 hours after the treatment.**

Arrival in Radiation Therapy Department

- You will meet your brachytherapy nurses who will review your chart.
- You will need to change into a hospital gown before each treatment.
- The nurse will instruct you to urinate for the last time before HDR treatment.
- The nurse will put an intravenous (IV) line in a vein in your arm. The IV will be used to give you medications and fluids during the procedure.
- You will be given medications to take by mouth.
- The brachytherapy nurse will answer any questions you may have.
- The nurse will take you into the procedure room.

Your treatment in the HDR Brachytherapy Suite

- There will be several staff in the suite. Usually, there are two registered nurses, two radiation therapists, a radiation oncologist, and physicist.
- The nurse will help you lie down on a special table. You will see an x-ray machine and other monitoring equipment around you. Your heart beat and blood pressure will be continuously monitored during the procedure.
- Your legs will be placed in stirrups in the same way as during a gynecological examination.
- During the procedure you will be put on oxygen, and will receive medication intravenously to reduce discomfort and pain. These medications can make you feel drowsy.
- Sterile drapes will be placed over your legs and abdomen. The nurse will begin by cleaning the area around your vagina.
- A catheter will be placed in your bladder since you will not be able to get up to go to the bathroom during the treatment.
- On the first day of HDR treatment, a Smit Sleeve will be inserted into your cervix by the gynecological oncologist in the brachytherapy suite. A Smit Sleeve is a plastic tube measuring 2 to 6 cm in length and approximately 0.5 cm in diameter. This will be done during a procedure called Examination Under Anesthesia (EUA) for which you will be given a general or spinal anesthetic.
- The radiation oncologist will use a speculum, which is a gynecologic instrument used to examine the cervix and to see the opening of the Smit Sleeve.
- The radiation oncologist will insert the treatment applicator into the Smit Sleeve and

vagina. You will feel fullness and this can cause some cramping inside your vagina and/or uterus. If this is uncomfortable, more medication will be given to you. This part of the procedure takes about 5 to 10 minutes.

- The radiation therapist will take x-rays and a scan to check the position of the treatment applicator. These x-rays and scans will be used to plan your treatment. This part of the procedure takes about 30 minutes.
- After the x-ray and scan, the radiation oncologist and physicist plan your treatment. This part of the procedure takes about 60 minutes. You may still be drowsy during this time.
- It is important that you remain still during the planning and throughout your treatment.
- Before the treatment starts, cables from the treatment machine will be attached to the applicator. The radioactive source will move through the applicator's tube to deliver the treatment.
- During your treatment the team will leave the room, but they will be able to monitor you with cameras and talk to you using an intercom. **The team can interrupt your treatment any time if you need help.**
- Women do not usually report any physical discomfort at this time.
- You will hear a clicking or humming of the treatment machine.
- Your treatment will last approximately 10 to 15 minutes. After which, the radioactive source will go back into the machine and the team will come back into the room.
- After your treatment is finished, the applicator and urinary catheter will be removed.

After HDR Treatment

- You may experience mild cervical cramping (similar to menstrual cramps).
- You will be monitored by the brachytherapy nurse for about 40 minutes or until medication has worn off. Once you are able to walk unassisted, you will be allowed to go home.
- The Smit Sleeve must remain in place for the three planned HDR treatments.
- If at any time the Smit Sleeve falls out, contact your brachytherapy nurse or your Patient Designated Nurse (PDN).
- At the end of your last treatment, the radiation oncologist will remove your Smit Sleeve.

Going home after HDR brachytherapy treatment

Sedation

You will be given an anesthetic on your first day of treatment and medications that make you drowsy for your second and third treatments. Drowsiness may last for a few hours after treatment. For 24 hours following your treatment do not:

- Drive
- Operate machinery
- Drink any alcohol
- Make any major legal decision.

You may resume your usual daily activities after 24 hours.

Bleeding

You may notice bleeding from your vagina after your treatment. The bleeding should decrease over the next four days.

- Use sanitary pads, not tampons.
- If bleeding increases, stop what you are doing and lay down with your feet up.
- If you are soaking two pads in 30 minutes, go to the Emergency Department.

Passing urine

At first you may have a burning feeling when you pass urine. This is usually caused by irritation from the catheter that was inserted during the procedure.

- Drink 6 to 8 glasses of water or cranberry juice, unless your doctor has told you to limit fluids.
- If you continue to have burning or difficulty passing urine, call your brachytherapy nurse or PDN.

Bowel movements

You may notice a change in your usual pattern of bowel movements. This may be caused by the radiation or other treatments you are receiving.

- If you have diarrhea (frequent, watery bowel movement), take the medication prescribed by your oncologist.

Showering

- You may shower.
- Use unscented soap on your genital area.
- Wash your genital area gently and pat the skin dry with a soft cotton towel. Be gentle in areas where there are skin folds.
- Avoid scratching and scrubbing the skin in the area being treated.

Genital discomfort and pain

- Protect the treated area from heat and cold.
- Do not use hot water bottles, heating pads or ice packs.
- Wear loose-fitting clothing over the affected area, preferably made of a soft material such as cotton. Do not wear silk or nylon underwear.
- Use unscented panty liners or natural-fiber pads. Avoid if possible daily use of pad or panty liner (especially when you are not menstruating). Do not use deodorant pads and tampons.
- Take pain medication as ordered if needed.

Sexual intercourse during HDR brachytherapy treatment

- Once the Smit Sleeve is inserted you cannot have sexual intercourse until it is removed. This is to prevent the Smit Sleeve from falling out.
- You may resume sexual intercourse two weeks after your last HDR treatment is finished, as long as you do not have pain, large amounts of bleeding, or infection.
- You will be given information on how to use a vaginal dilator as part of your treatment to prevent scarring of your vagina.

Psychological issues

Some women with cervical cancer experience fear, sadness, and/or anxiety about the future – recognizing these feelings is important. Some signs can include: constantly wanting to be alone, frequent angry outbursts, panic attacks, etc.

Let your team know if you are struggling, as we may suggest a referral to the Psychosocial Oncology Program (PSOP). If you are concerned about coping and have not been referred, you can request a referral from any team member.

When to get medical help

Call the brachytherapy nurse or your PDN if you notice any of the following problems:

- You continue to have burning or difficulty passing urine.
- You have chills or fever (temperature over 38.5° C or 101.3° F).
- You notice a change in the type of the vaginal discharge or have discharge with a bad smell.
- Your abdominal pain is unrelieved by Tylenol or Ibuprofen.
- You notice a change in or have difficulty with bowel or bladder function.

Go to the General Campus Emergency Department or to your nearest Emergency Department if you have the following problem:

- You have heavy vaginal bleeding that soaks two or more pads within 30 minutes.

Your scheduled appointments

- Pre-Admission Unit: _____
- Smit Sleeve insertion and 1st HDR brachytherapy treatment: _____
- 2nd HDR brachytherapy treatment: _____
- 3rd HDR brachytherapy treatment: _____
- Follow-up with radiation oncologist: _____

Questions

If you have any questions or concerns about the HDR treatment, call the brachytherapy nurse or your patient-designated nurse (PDN).

- Dr. E's PDN: 613-737-7700, ext. 70386
- Dr. Samant's PDN: 613-737-7700, ext. 70386
- Dr. Lupe's PDN: 613-737-7700, ext. 70420
- Brachytherapy Nurse: 613-737-7700, ext. 73940

Resources

The Ottawa Hospital Learning Services

Do you need help finding more information about your disease? The Ottawa Hospital's Learning Services can provide informational resources to patients and families upon request. Please email Learning Services at learningservices@toh.on.ca or leave a message at 613-737-8899 ext. 70107.

Suggested Web sites

- The Ottawa Hospital: www.ottawahospital.on.ca
- Canadian Cancer Society: www.cancer.ca
- National Cancer Institute: www.ncic.cancer.ca
- Cancer Care Ontario: www.cancercare.on.ca

We hope this book has helped to guide and support you at this time. The information comes from team members and patients like yourself. Your suggestions are important.

The Division of Gynaecologic-Oncology asks for your support in attaining Excellence in Patient Care, Research and Education. The Division of Gynaecologic-Oncology has research accounts. Please consider a donation. All donations are tax receiptable. Your gift is greatly appreciated.

**The Ottawa Hospital, The Division of Gynaecologic-Oncology,
General Campus
501 Smyth Road, Room 8130
Ottawa, Ontario K1H 8L6
c/o Gynaecologic-Oncology Research Account**

The Ottawa Hospital
Patient Information Booklet
A guide to your HDR brachytherapy for cancer of the cervix

Patient Survey

Dear patient,

We would like to know what you think about this booklet.

Please:

- Complete the survey on the next 2 pages.
- Give the completed survey to your nurse before leaving the hospital.

OR

- Mail the completed survey to:
Clinical Manager, 5 East Medical Oncology Unit
c/o The Ottawa Hospital, General Campus
501 Smyth Road,
Ottawa, Ontario
K1H 8L6

Your comments will help us to make the booklet better.

Thank you,

Medical Oncology Clinical Pathway Team

Dear family member/caregiver,

If you are using this booklet because the patient is not able to use it—please complete the survey questions yourself.



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Patient Survey

1. Information about the Patient

Discharge Date	Year: _____ Month: _____
Age	<input type="checkbox"/> 18 – 69 years <input type="checkbox"/> 70 years or more
Sex	<input type="checkbox"/> Female <input type="checkbox"/> Male
Education	<input type="checkbox"/> No High School <input type="checkbox"/> Some High School <input type="checkbox"/> High School completed <input type="checkbox"/> College <input type="checkbox"/> University
Language	Able to read: <input type="checkbox"/> English <input type="checkbox"/> French <input type="checkbox"/> Other, specify _____ Able to speak: <input type="checkbox"/> English <input type="checkbox"/> French <input type="checkbox"/> Other, specify _____
Who is completing the survey?	<input type="checkbox"/> Patient <input type="checkbox"/> Family member/support person – Please tell us why the patient is not completing the survey. _____

2. Questions about the booklet – Please check ✓ your answer

Questions	Yes	No	Not Sure
1. While you were in hospital, did someone explain the purpose of the booklet?			
2. While you were in hospital, did someone explain the clinical pathway?			
3. Did the booklet help you to understand your care in hospital?			
4. Did the booklet help you understand how you can help yourself?			
5. Did the booklet help you prepare for discharge?			



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Patient Survey

What did you like about the booklet?

How can we make the booklet better?

Please:

- Cut the completed survey out of the booklet
- Give it to your nurse before you leave hospital

OR

- Mail it to:
Clinical Manager, 5 East Medical Oncology Unit
c/o The Ottawa Hospital, General Campus
501 Smyth Road,
Ottawa, Ontario K1H 8L6

Thank you very much

*The HDR Brachytherapy clinical pathway team
5 East Medical Oncology Unit – The Ottawa Hospital*