

Brachytherapy Treatment



Brachytherapy Treatment

Brachytherapy works by precisely targeting the cancerous tumour from inside the body. The source of radiation is placed directly inside or next to the tumour.

HIGH DOSE RATE (HDR) BRACHYTHERAPY:

- HDR brachytherapy uses radioactive sources that gives out a higher level of radiation.
- Patients can often receive treatment on an outpatient basis (i.e. you may not need an overnight stay in hospital), or as inpatient if general anaesthesia is needed.
- However, each session of treatment has to be spread out. Typically, 2 - 3 short sessions of treatment are required, each a few days apart.
- Each session can be completed in 1 day.
- HDR brachytherapy is commonly used to treat gynaecological cancers such as cervical cancer and endometrial (womb cancer) in combination with external beam radiotherapy.



Brachytherapy Procedure:

CATHETER PLACEMENT:

- The doctor will place applicators (also known as catheters) into the vagina and womb.
- To prevent the catheters from moving, protective gauze may be used to cushion the catheter in place.
- An anaesthetic is normally given prior to the procedure to avoid any discomfort.
- A catheter for urine will also be placed in so that patients do not have to get out of bed to go to toilet during their treatment.

PLANNING:

- Once the catheters are in place, a CT-Scan (Computerized Tomography Scan) is done to provide an accurate image of the catheter and its position.
- This image helps the doctor calculate how much radiation is needed to treat the cancer and where the radiation should be targeted in the cervix.



Tandem & ovoid applicator



Tandem & ring applicator



Vaginal cylinder



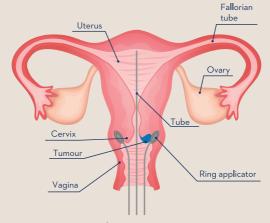
Tandem & ring applicator



Tandem & Ovoid applicator in place (as seen by x-ray)



High Dose Rate Brachytherapy for Gynecological Cancer



Treatment Delivery

RADIATION DELIVERY:

- The applicators are attached to a computer controlled machine, known as an afterloader.
- The afterloader sends small radiation sources down the catheters to the treatment site in the cervix.
- The radiation sources are then left in place for a predetermined period of time (usually a few minutes).
- The computer is programmed to control accurately where the radiation is delivered and how long the source remains in the cervix.
- This ensures that a very precise and accurate dose of radiation is delivered to the tumour.
- Apparently, this reduces radiation induced side effects to the healthy surrounding tissues or organs.

- After the set period of time, the sources are returned to the afterloader.
- The applicators are removed after the procedure
- Each session can be completed in 1 day.

POST-PROCEDURE MONITORING

- A follow-up appointment will be scheduled approximately 4 to 6 weeks after the procedure.
- This appointment is to confirm that the treatment is going well and monitor for any possible side effects.

SIDE EFFECTS

 All treatments for cervical cancer carry a risk of side effects. People respond to treatments in different ways.



- The type of side effects that may be experienced depends on a number of factors, such as the stage of the cervical cancer and whether there are any compounding health problems.
- Side effects may appear in the short-term (known as acute side effects) or several months later (long-term side effects).
- Brachytherapy is generally associated with a reduced risk of long-term side effects compared to other treatment options for cervical cancer. Immediately after the brachytherapy procedure, you may experience some of the following:
 - Nausea (feeling sick)
 - Tiredness
 - Diarrhea
 - Discomfort when passing urine
 - Minor vaginal bleeding after removal of treatment devices
 - Soreness or redness of the vulva or back passage

These short-term side effects are typically mild in nature and usually resolve soon after treatment.

Possible long-term side effects of brachytherapy include:

- Urinary discomfort (bladder problems)
- Bowel discomfort (loose or more frequent bowel motions)
- Vaginal fibrosis (less stretchy and narrower) and vaginal dryness
- Early menopause (as the ovaries may not function)



Usually some of these long-term side effects will disappear over the time.

Brachytherapy is generally associated with a reduced risk of long-term side effects compared to other treatment options for cervical cancer, such as surgery. Discuss your treatment options and the relative risks of potential side effects with your doctor.

Call for appointments: Oncology Centre 03 2160 0344



PRINCE COURT

MEDICAL CENTRE

for you. for life.



Best Brands Award 2022-2023 in Healthcare Category warded by The BrandLaureate



- · Medical Tourism Hospital of the Year
- · Clinical Service Initiative of the Year



· Orthopaedic Serv









Prince Court Medical Centre Sdn. Bhd.

(Registration No. 200201032170 (599835-A) 39, Jalan Kia Peng, 50450 Kuala Lumpur, Wilayah Persekutuan, Malaysia

- T:+603 2160 0000 / +603 2160 0999 Emergency
- E : enquiries@princecourt.com
- W: www.princecourt.com







(f) (in) PrinceCourtMC