

RT Techniques

External Beam Radiation Therapy

Volumetric Modulated Arc Therapy (VMAT)

- Volumetric Modulated Arc Therapy (VMAT), also known as RapidArc, represents an advanced radiotherapy technique
- During VMAT treatment, the machine rotates 360 degrees while simultaneously adjusting the intensity, shape and dose rate. This allows for precise targeting of irregularly shaped tumors and sparing surrounding healthy tissues, reducing risk of side effects, such as urination and bowel discomfort
- Compared with conventional radiotherapy, VMAT offers the distinct advantage of significantly reduced treatment time, often just a few minutes. Patients are spared from prolonged immobilization on the treatment couch, reducing discomfort during treatment

Image-Guided Radiotherapy (IGRT)

Image-Guided Radiation Therapy (IGRT) is fully utilized in our centre.
 Image verification is conducted before each treatment, with a six-dimensional treatment couch to adjust patient positioning, ensuring precise tumor localization and minimizing displacement errors

Brachytherapy

 Our center offers both intracavitary brachytherapy (ICC) and vaginal intracavitary brachytherapy (Tandem). The doctor will inserts an applicator into the vaginal or uterine cavity and radiotherapists will connect the applicator to a specialized tube, allowing the radiation source travels close to the tumor through the tube to give a high and concentrated dose while reducing side effects effectively

Treatment Overview



Cervical and endometrial cancers can be treated with external Volumetric Modulated Arc Therapy (VMAT), which enables precise dose modulation to concentrate radiation on the target area while sparing healthy tissues. Treatment plans are individualized according to tumor characteristics and patient-specific needs, typically consisting of 20 to 30 sessions. Brachytherapy also serves as an essential modality, with the radiation source placed directly within the uterus or near the cervix to deliver an additional high dose to the primary tumor, thereby minimizing risks on surrounding healthy tissues, typically consisting of 3 to 5 sessions.

Features

Artificial Intelligence (AI)

• By incorporating the latest medical technologies, artificial intelligence is integrated into dosimetry procedures to enhance both efficiency and safety

Tattooless Skinmark

- Delivers precise treatment using the IGRT technique without permanent tattoos
- Eliminates pain and invasive piercing from tattoo marking procedure
- Eliminates cosmetic concerns

Professional & Efficient

- Surface-guided and IGRT techniques reproduce simulation position accurately
- Employs computerized automatic tracking and verification technology, imaging localization can be completed quickly before each treatment
- With the VMAT technique, treatment duration is reduced (substantially from 30 minutes to less than 10 minutes), increasing treatment effectiveness and accuracy

Research Vevelopment & International Awards

We are dedicated to advancing and refining treatment technologies. Actively participating in international radiation dosimetry competitions, we have been recognized with multiple awards in various cancer contests. For more details, please refer to the "Radiotherapy Planning Awards" brochure.

RT Procedures & Notice

1) First Consultation

Our oncologists will listen and understand your situation carefully to tailor the most suitable radiation therapy scheme for you.

2) Treatment Preparation

Bladder Status Control

• To maintain the consistency of bladder volume between simulation and treatment, you will be instructed to drink water before radiotherapy procedures to reach the same sensation of urgency, stabilizing the location of bladder and reducing risk of side effects.

Bowel Preparation

- Regular bowel movement at home helps stabilize intestinal positioning, minimizing variability and effectively reduce the risk of side effects.
- Consult your oncologist for medication if you experience difficulty in bowel movements.

3) Simulation & Computed Tomography

A customized immobilization device will be created based on your body contour to ensure stable positioning, followed by a CT scan specifically for radiation dosimetry. This helps the oncologist to define treatment area and prescribe radiation dose accurately.

4) External Beam Radiotherapy Plan Dosimetry

Our dosimetry team will compute a personalized treatment plan that precisely targets tumor cells while minimizing damage to surrounding healthy tissues.

5) Imaging Verification

Before each VMAT treatment, X-ray On-Board Images (OBI) or Cone-Beam CT scans (CBCT) will be used to verify target localization and positioning accuracy.

6) Treatment Position Verification & Adjustment

After image verification, we utilize a Six-Degree-of-Freedom (6 DoF) couch to adjust positioning effectively, enhancing treatment precision.

7) Treatment Delivery

Radiotherapy will be delivered according to your individualized treatment plan. Each session for cervical or endometrial cancer treatment typically lasts about 10 minutes.

8) Brachytherapy

Additional internal brachytherapy may be arranged to boost local dosage according to doctor's prescription.

9) Post-Treatment Care and Follow-Up

Throughout the treatment course and following completion, we closely monitor both therapeutic effectiveness and potential side effects.

Possible Side Effects &

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<u>Urinary Discomfort</u> (Frequent Urination, Painful and Bleeding)

Consult your oncologist for medication to relieve symptoms

Bowel Changes

- Diarrhea: Adopt low-fibre diet
- Constipation: Consume more vegetables, and use laxatives if necessary
- Consult your oncologist for medication to relieve symptoms

Vaginal Irritation

(Increased Secretion Temporarily, Dryness)

- Maintain vaginal hygiene
- Consult your oncologist for medication to relieve symptoms

<u>Fatigue</u>

 Get plenty of rest, maintain a balanced diet, and ensure adequate nutritional intake

Service Commitment

Our team has extensive experience in dosimetry and commits to completing your treatment planning and starting treatment within one week.

kT Charges

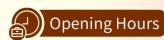
We commit to providing professional and highquality medical services to patients from all backgrounds at reasonable fees. For details on charges, please refer to the "Radiation Therapy Charges" or call 2200 3493 for inquiries.



WhatsApp: 7072 2408
Tel: 2200 3493

? Centre Address

B3/F, Main Block, 327 Prince Edward Road West, Kowloon, HK



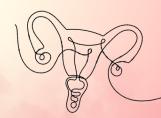
Monday - Friday

09:00-18:00

Saturday

09:00-12:30

Sunday & Public Holiday
Closed



Radiotherapy SPUS in ECETVIX Cancer

