



## Introduction to Radiation Therapy

### 放射線治療簡介(英文)

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Radiation therapy transmits via the form of photon or high-speed particles, using higher-energy radiation to treat tumor or certain diseases. Radiation therapy is also commonly known as the "radiotherapy".

High-energy radiation could kill the cells inside the body by preventing the cells from continued growth and division. The quantity of tumor cell growth and division is far more thriving than the regular tissue cells, and the radiation therapy applies such properties to destroy the tumor cells with faster growth and division. The repairing capacity of normal tissue is better and hence will bring less injury to the peripheral normal tissues.

Traditional radiation therapy is often completed in multiple fractions and in general 5 fractions a week, from Monday to Friday. The reaction occurred from the therapy is related to the number and dose of therapy.

#### **Treatment Method**

- External beam radiation therapy ( teletherapy ) and internal radiation therapy ( brachytherapy ). External beam radiation therapy ( teletherapy ), with the source of radiation outside of the body, treats the tumor on the fixed area of the patients using designed therapy plan.
- Internal radiation therapy (brachytherapy) places the source of radiation next to the tumor or inside the tumor tissue. Such therapy can increase the tumor dose while preventing the normal tissues near the tumor to face with unnecessary harm. The therapy can be consolidated with external beam radiation therapy ( teletherapy ).

We will have a group of professional medical team to prepare and take subsequent care for radiation therapy:

- Radiation Oncologist : Determines the guidelines of radiation therapy, develops treatment plan, care and evaluate the effect of therapy and follow up the post-therapy condition.
- Medical Physicist : Responsible for the calibration, acceptance, and testing and quality control of machines, dose verification and evaluation, computer design of therapy plan, and radiation protection and barrier design.
- Radiologist : Executes the production of fixing mold, simulation positioning and radiation therapy process, and recording daily therapy dose.
- Nurse : Provide patients and family with radiation therapy related knowledge, nutrition health education and emotional support as well as assisting physicians to check and trace patients.
- Social Worker : Provide patients and family with psychological comfort while seeking for medical aids and resources for patients with financial difficulty, solving their problems in life.
  
- Nutritionist : Instructing patients to consume full nutrition during the treatment period so the patients will maintain good nutrition condition, increase treatment effect and thereby reduce side effects.
- Case managers: Provide patients and family members with communication with the medical team during initial diagnosis, surgery, chemotherapy, radiotherapy, or other cancer-related examinations and treatments.

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若有任何疑問·請不吝與我們聯絡  
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