

Radiation therapy :

Is the medical use of ionizing radiation, generally as part of cancer treatment to control or kill malignant cells. Radiation therapy may be curative in a number of types of cancer if they are localized to one area of the body. It may also be used as part of curative therapy, to prevent tumor recurrence after surgery to remove a primary malignant tumor (for example, early stages of breast cancer).

Radiation therapy is commonly applied to the cancerous tumor because of its ability to control cell growth. Ionizing radiation works by damaging the DNA of exposed tissue leading to cellular death. It is also common to combine radiation therapy with surgery, chemotherapy, hormone therapy, Immunotherapy or some mixture of the four.

Types of radiotherapy

External Beam Radiotherapy , When the radiation source is present outside the body), uses high-energy x-rays or gamma rays, It produces less damage to the skin at the entry port, is absorbed less in bone, and is scattered less, thus reducing the exposure to tissues outside the x-ray beam

Internal radiation therapy (Brachytherapy) is delivered by placing radiation source(s) inside or next to the area requiring treatment , so the tumour can be treated with very high doses of localized radiation, whilst reducing the probability of unnecessary damage to surrounding healthy tissues ,this type of radiation is commonly used in cervical cancer and uterine cancer .

Side effects

Radiation therapy is in itself painless.

Many low-dose palliative treatments (for example, radiation therapy to bony metastases) cause minimal or no side effects, although short-term pain flare up can be experienced in the days following treatment due to oedema compressing nerves in the treated area.

The main side effects reported are fatigue and skin irritation, like a mild to moderate sun burn. The fatigue often sets in during the middle of a course of treatment and can last for weeks after treatment ends.

Other side effects , Intestinal discomfort , radiation proctitis ,fibrosis and cancer.