Radiation Therapy: An Overview

What is Radiation Therapy?

Radiation therapy (also called radiotherapy) is a type of cancer treatment that uses high doses of radiation to kill cancer cells and shrink tumors. It works by damaging the DNA inside cancer cells, making it impossible for them to grow and divide.

How is the Treatment Given?

There are two main types of radiation therapy:

1. **External Beam Radiation Therapy** – The most common form, where a machine (called a linear accelerator) directs radiation beams at the cancer from outside the body.

2. **Internal Radiation Therapy (Brachytherapy)** – Involves placing a radioactive source inside the body, near the cancer cells.

External radiation is delivered in a treatment room. Patients lie still on a treatment table while the machine moves around them, delivering radiation precisely to the target area.

Is Radiation Therapy Painful?

The treatment itself is painless. It is very similar to getting an X-ray. Patients do not feel the radiation during the session. However, side effects may develop over time, such as fatigue, skin irritation, or other symptoms depending on the area being treated.

How Long Does Each Session Take?

A typical radiation therapy session lasts about 10 to 30 minutes. Most of that time is used for setting up and positioning. The actual radiation exposure lasts only a few minutes.

How Many Sessions Are Needed?

Treatment plans vary depending on the type and location of cancer. Most patients receive radiation therapy five days a week for several weeks. The total number of sessions (also called fractions) is determined by the oncologist.

Side Effects and Recovery

Side effects vary from person to person. Some common side effects include:

- Fatigue

- Skin changes (redness, dryness)

- Hair loss (only in the treated area)

Most side effects go away within a few weeks after treatment ends.

Frequently Asked Questions

1. Does the machine (linear accelerator) touch me during treatment?

No. In the case of external beam radiation therapy, the machine does **not** touch the patient at any time. It moves around the body to deliver radiation from different angles but never makes physical contact.

2. Can I move during the treatment session?

No, you must remain completely still during the treatment. However, you are allowed to breathe normally, exactly as instructed by your radiation therapists. Staying still helps ensure the radiation is delivered precisely to the intended area.

3. Who are the professionals involved in my treatment?

Your radiation therapy treatments will be administered by specialized professionals called **radiation therapists**. You will also have regular check-ups with your **radiation oncologist**, the doctor responsible for your radiation treatment. In addition, **nursing staff** will be available to answer your questions and support you in managing any side effects you may experience during your treatment.

Conclusion

Radiation therapy is a widely used, effective cancer treatment that targets tumors while preserving healthy tissue. It is non-invasive, painless during sessions, and usually performed on an outpatient basis. If you or someone you know is undergoing radiation therapy, discussing the treatment plan with a radiation oncologist can provide personalized information and reassurance.

4. Can I be around children and pregnant women after my treatment sessions?

Yes, you can be around children, pregnant women, and anyone else you wish. There is absolutely no risk to others after you receive external radiation therapy. The radiation does not stay in your body, so it is completely safe to interact with others normally.