

External Beam Radiotherapy

What Is External Beam Radiotherapy (Ebrt)?

External beam radiotherapy (EBRT) is a common method of treating cancer using high-energy radiation beams aimed at the tumour from outside the body. The goal is to destroy cancer cells while minimising damage to surrounding healthy tissue. EBRT is utilised for various types of cancer and can be used alone or in combination with other treatments such as surgery and chemotherapy.

What Does External Beam Radiotherapy Involve?

The process of EBRT involves several key steps:

- **Consultation and planning:** The treatment begins with a consultation with a radiation oncologist who will discuss the therapy's objectives, potential side effects, and the overall treatment plan. A detailed planning session, often involving imaging scans like CT or MRI, helps to map out the exact location of the tumour.
- **Simulation:** During simulation, the patient is positioned on a special table, and their body is marked to ensure precise alignment for each session. Immobilisation devices such as masks or moulds might be used to keep the patient still.
- **Treatment sessions:** EBRT is usually delivered in multiple sessions over several weeks. Each session lasts about 15 to 30 minutes, although the actual radiation exposure is only a few minutes. The patient lies on the treatment table while the machine moves around them to deliver radiation from various angles.
- **Monitoring and adjustments:** Throughout the treatment course, the medical team monitors the patient's progress and makes any necessary adjustments to the treatment plan. This ensures optimal delivery of radiation to the tumour while sparing healthy tissues as much as possible.

How Do You Prepare For Treatment?

Preparation for EBRT involves several steps:

- **Initial consultation:** Discuss your medical history, current medications, and any concerns with your oncologist.
- **Pre-treatment imaging:** Undergo imaging scans to help in creating a precise treatment plan.
- **Skin care:** Follow specific guidelines provided by your healthcare team to care for your skin in the treatment area.
- **Diet and hydration:** Maintain a healthy diet and stay well-hydrated. Your doctor may give

specific dietary instructions depending on the treatment area.

- **Rest and relaxation:** Get plenty of rest and try to stay relaxed. Stress management techniques such as meditation or gentle exercise may be beneficial.
- **Communication:** Keep open communication with your healthcare team. Report any side effects or discomfort you experience during the treatment.

How Long Does External Beam Radiotherapy (Ebrt) Take?

The duration of EBRT varies depending on the type and stage of cancer, as well as the specific treatment plan. Typically, the entire course of EBRT spans several weeks, with patients receiving treatment five days a week. Each individual session usually lasts between 15 to 30 minutes, though the actual radiation exposure time is only a few minutes.

In summary, while the overall treatment timeline may be a few weeks, the daily commitment for each session is relatively short. Regular breaks between treatments allow healthy tissues to repair and reduce the likelihood of side effects.

External Beam Radiotherapy is a precise and effective cancer treatment option, offering the potential for significant tumour control while maintaining the quality of life for patients.