

Our mission in the department of Radiotherapy is to provide the highest possible standard of care for patients and their families during their treatment. The continuum of care is essential in the treatment of cancer from diagnosis through to follow up and our small focused and friendly multidisciplinary team ensures this quality of care. The department uses state of the art equipment allowing us to deliver precise treatments whilst implementing the most up to date techniques in radiotherapy planning and treatment.

RADIATION TREATMENT AND CARE.

Treatment is delivered by a dedicated team of Radiation Therapists who ensure the safe and accurate delivery of treatment and maintain an accurate record of treatment. This involves the use of a Siemens Oncor linear accelerator, equipped with MLC and a flat panel imaging device which is used in conjunction with DRR's for treatment verification. The dose prescribed to be delivered is also verified during the course of treatment using dose reading meters (diodes).

On the first day of treatment a Radiation Therapist will provide clear and accurate treatment information, advice and support to the patient. An appointment schedule tailored to suit his/her individual circumstances is then given.

Throughout the course of treatment and following on from it the patient is carefully monitored by a highly trained multidisciplinary team which consists of the Radiation Therapists, Physicists, Consultant Radiation Oncologist and Oncology nurse, with links to support groups and a wider field of health.



The Galway Clinic is located on the N6 Dual Carriageway off the Martin Roundabout

To receive further information about radiotherapy and for consultants contact details, please telephone the radiotherapy reception.

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Radiotherapy in the Galway Clinic is covered by all major health insurance providers namely VHI Quinn Health care, VIVAS, Garda Medical Aid & ESB

RADIOTHERAPY DEPARTMENT



We have cover with all major health insurance providers.

WHAT IS RADIOTHERAPY & HOW DOES IT WORK

Radiotherapy is the use of exact, carefully measured doses of radiation to damage the DNA within abnormal cells and destroy their ability to reproduce. These cells are then naturally eliminated by the body.

It is a complex process involving many steps, personnel and equipment. Radiation therapy is prescribed by a consultant Radiation Oncologist and given by highly skilled Radiation Therapists, who use special machines called Linear Accelerators which produce different types of radiation.

The accuracy with which each step of the process is carried out has a major impact on both the prospect of tumour control/cure and the attendant risk of normal tissue complication/patient side effects.

WHAT YOU NEED TO KNOW

WHY RADIOTHERAPY

Radiation therapy is a very useful and effective way to treat cancer. Depending on the patient's diagnosis it may be used as the primary treatment or in conjunction with other treatment modalities such as surgery, chemotherapy, hormone therapy and immunotherapy.

WHAT HAPPENS?

Initial consultation with your Radiation Oncologist



Pre-treatment CT/Simulation



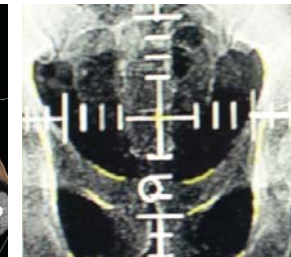
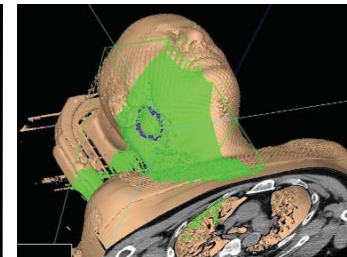
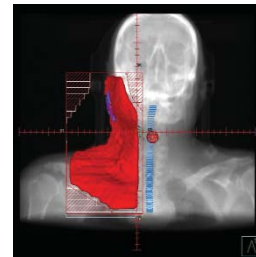
Planning, Dosimetry and Quality Assurance Checks



Radiation Treatment and Care



Follow-up



CT SIMULATION

Simulation often called "marking" is done to decide on the exact location for treatment. It is necessary to localise the treatment site and surrounding critical organs, this information is obtained via a planning CT scan.

This differs from a diagnostic CT scan in that the patient is scanned in the optimum treatment position which can be reproduced on a daily basis. This information is then sent to a comprehensive 3 Dimensional planning system. This is known as virtual simulation where an entire treatment plan can be produced using the one CT scan.

PET/CT SIMULATION

Ongoing studies have highlighted the advance of PET/CT as a prime modality for the localisation of some tumour sites. This procedure has been introduced recently as part of our ongoing technological advances within the department.

PLANNING, DOSIMETRY AND QUALITY ASSURANCE CHECKS

To determine the intensity, duration and position of the radiation beams a comprehensive 3-Dimensional computer planning system is utilized by a team of radiation dosimetrists to achieve the most optimal plan. The 3-D system enables complete visualization of structures within the body allowing for accurate and precise planning. Beam shaping devices and multi leaf collimators (MLC's) are utilized to shield out critical organs surrounding the target volume to produce a homogenous tumour dose. All data is transferred via DICOM to the linear accelerator including Digitally Reconstructed Radiographs produced from the CT scan which are used for treatment verification. Radiation Dosimetry and Physics Quality assurance is maintained at each phase of the treatment process.

IMRT

The Galway Clinic recently introduced the delivery of Intensity Modulated Radiation Therapy (IMRT). IMRT is an advance in conformal radiotherapy whereby complex shaped tumour volumes can be treated to high doses whilst sparing surrounding structures.