Central Coast Cancer Centre

Radiation Oncology Service

Information about radiotherapy for rectal cancer

All enquiries Phone: (02) 4320 9888 Fax: (02) 4320 9780
Introduction

The Central Coast Cancer Centre offers the latest technological advancements combined with comprehensive and supportive care for patients undergoing radiotherapy treatment for rectal cancer.

This booklet should be read along with the ‘Radiotherapy information for patients, families & carers’ booklet which contains information about staff and the services available at the Central Coast Cancer Centre, including transport and parking information.

Specialist Appointment Information

Date: .................................................................................................................................

Time: .............................................................................................................................

Location:  
☐ Central Coast Cancer Centre, Gosford Hospital
☐ Cancer Day Unit, Wyong Hospital

Radiation Oncologist: .................................................................................................

Cancer Nurse Coordinator: ..........................................................................................
The rectum is the last part of the large bowel before it opens into the anus. It is approximately 15 cm long and is often divided into three sections - upper, middle and lower.

Radiotherapy and/or chemotherapy is usually given before an operation to help the surgeon completely remove the cancer, sterilise any pelvic lymph nodes that may have cancer cells, and to lessen the chances of the cancer returning in the pelvis.

Radiotherapy is designed to destroy cancer cells and stop them from growing. The radiation dose is limited to any surrounding normal cells. This allows the normal healthy cells to repair themselves, recover and survive.

The Central Coast Cancer Centre offers patients precise radiotherapy techniques called Intensity Modulated Radiotherapy (IMRT) and Volumetric ARC Radiotherapy (VMAT) to minimise the dose to normal organs.

Radiotherapy is delivered to the primary cancer in the rectum as well as the surrounding areas which may include the lymph glands.

All patients are treated with ‘image guided radiotherapy’. This means that the rectal treatment position is checked daily prior to treatment with special x-rays.
Initial appointment with the radiation oncologist

If the radiation oncologist recommends radiotherapy as treatment they will explain:
• The reason and benefits for using radiotherapy.
• The exact areas that will be targeted with radiotherapy.
• The number of daily treatments needed.
• The possible early and late side effects of treatment and how to prevent and manage these.

• What will happen at the radiotherapy planning session and on treatment.
• If chemotherapy is also recommended, an appointment will be arranged for a medical oncologist to explain the chemotherapy treatment, its benefits and the possible side effects.

Radiotherapy treatment plan

Number of treatments  

Chemotherapy  □ Yes  □ No

The radiation oncologist will go through expected side effects, as these may vary depending on the area being treated and the total dose given.
Radiotherapy planning

The radiation therapists use specialised equipment to ensure patients are in a stable and comfortable position for the planning CT and each treatment.

Once positioned, the radiation therapists will place three very small permanent ink marks (tattoos) on the skin as reference marks.

**Important preparation for the planning CT scan**

The shape and size of the bladder and bowel can vary on a daily basis. A good bladder and bowel preparation reduces treatment side effects and improves the accuracy of radiotherapy. A bladder and bowel preparation guide will be provided by the doctor at the initial appointment.

**Bowel Preparation**

Before leaving home, the bowel should be emptied as much as possible. This helps to improve the accuracy of treatment.

**Bladder Preparation**

The bladder will need to be emptied on arrival at the planning and daily treatment appointment. Then drink 1-2 cups of water to comfortably fill the bladder. This routine helps move any bowel away from the treatment area and reduces side effects. It is important that the bladder is not overfilled for the planning CT scan or daily treatment.

This preparation needs to be repeated daily for treatment appointments.

A CT scan is completed and used to create a customised treatment plan. The planning appointment will take approximately 60 minutes.
Radiotherapy treatment

The patient will be positioned for treatment using the same specialised equipment used at the planning appointment.

The bladder and bowel preparation procedures will also need to be repeated each day. If chemotherapy is recommended, it is typically given starting on the first day of radiotherapy. If unsure, please speak to the medical oncologist and care coordinator about starting chemotherapy.

Each radiotherapy treatment takes approximately 10-20 minutes, however it is suggested that patients allow up to 30 minutes each day which includes waiting times. Treatments are given Monday to Friday each week for five to six weeks. The machines have scheduled maintenance fortnightly on Thursdays so appointment times may be changed on these days.

Follow up after radiotherapy treatment

Nurse follow-up

The specialist radiotherapy nurses will arrange a review one week after radiotherapy finishes. This can be done via a phone call if side effects from treatment are minor, or a more thorough review at the Cancer Centre if side effects persist.

Doctor follow-up

An appointment will be arranged to see the radiation oncologist after radiotherapy finishes - typically six weeks after the last treatment. Your doctor will assess recovery from any side effects and progress made towards returning to a normal routine.

If surgery is needed after radiotherapy, contact the surgeon ahead of time and inform them of the final radiotherapy treatment date.

The doctor will also discuss longer term follow up arrangements which may involve the surgeon, radiation oncologist and/or the medical oncologist alternating for at least five years.
Side effects of radiotherapy

The radiation oncologist will explain the expected side effects depending on the dose and the area being treated. Radiotherapy to the rectum is generally well tolerated and most patients are able to continue with their normal routines including work.

**General side effects during and shortly after treatment**

**Tiredness**
Tiredness can start 1-2 weeks into treatment and last for several weeks/months after treatment has finished. The level of tiredness varies between patients. If tiredness is a concern, please discuss it with the nursing or medical staff.

**Expected side effects during treatment**

**Skin changes**
Skin around the pelvis area may become pink, dry and itchy during the second or third week of treatment. The skin around the anus can become red and irritated towards the end of the treatment. The nursing staff will provide advice on creams and dressings if needed. Other creams and ointments may worsen the skin changes, so please see the nurses or doctor before using them.

**Bowel irritation**
Patients without stomas (a bag attached to the abdomen), may need to go to the toilet more often, pass a lot of wind, and develop discomfort when passing a motion.

Some patients may develop rectal bleeding or a mucous discharge and occasionally complain of stomach cramps.

If a patient has a stoma, then the treatment is often a lot easier and many of these side effects are avoided. Blood and mucous may still be noticed coming from the anus if the stoma is temporary. Patients with a permanent stoma may notice that the skin around the scar gets uncomfortable.

**Bladder irritation**
The bladder preparation and shielding usually prevents bladder irritation however there may be a need to urinate more frequently and a stinging sensation may be noticed when doing so. It is advised to notify the medical and nursing staff of these side effects.

**Side effects experienced during treatment will normally resolve four to six weeks after treatment finishes.**
Potential side effects after treatment

Radiotherapy treatment is designed to help patients recover from radiotherapy without developing problems in the future as a result of treatment. Complications can occur with any treatment and it is possible that radiotherapy, in combination with the chemotherapy and surgery, may cause some permanent side effects.

Complications may become evident months or even years after treatment has finished. It is important to remember that the risk of complications is generally much less than the risk of the cancer coming back and causing problems if patients don’t have treatment.

Surgical complications

Radiotherapy may lead to a small increase in complications after surgery such as delayed or poor wound healing.

Hair loss

It is common for some patients to lose hair only in the treatment area. Some hair will usually grow back three to six months after treatment finishes.

Bowel changes

Radiotherapy treatment very rarely causes permanent bowel changes. Patients sometimes need to go to the toilet more often, have more difficulty holding onto bowel motions, or may have a blood or mucus discharge from the anus.

Bladder changes

Radiotherapy may cause some bladder problems and patients may need to rush to go to the toilet, or see blood in their urine. The bladder is avoided where possible so the risk of permanent bladder changes is very low.

Bone density changes

Radiation doses to bones in the pelvis is usually low, so bone density changes are uncommon. The hip joints and sacrum will receive some radiation dose and in some cases these bones may weaken. This may increase the risk of bone fractures in this area.

Sexual function for men

The risks of nerve damage from surgery can affect the ability to achieve and maintain erections. This issue may affect some patients for up to a year after treatment has finished.

Sexual function for women

Radiotherapy may trigger menopause shortly after treatment finishes. Some women may find their vagina is drier, or has narrowed following radiotherapy. A water based lubricant and vaginal dilators can help manage any pain and discomfort associated with intercourse or with routine health checks such as pap smears. The doctor will discuss symptom management and health issues relating to menopause.

Fertility

Radiotherapy can cause infertility in men and women and reduce the ability to have children. If this may be a concern, please speak to the doctor about fertility options before treatment starts.

Lymphoedema

Swelling of the legs due to poor lymphatic drainage is rare and can occur at any time during, or after, radiotherapy treatment. The risks are very low however and in some cases may occur many years after treatment finishes.

Any swelling in the legs or groin should be reported to the doctor as soon as possible for treatment. Physiotherapists or occupational therapists are skilled at preventing or managing lymphoedema.

Second cancer risk

There is a very small risk that radiation can cause a second cancer in the area treated. The doctor will discuss risks and monitoring methods.
Rectal cancer supportive care

Cancer Nurse Coordinator
A dedicated Cancer Nurse Coordinator is available for patients having treatment for bowel cancers. They can be contacted via the Central Coast Cancer Centre on 02 4320 9824. The coordinator will be a central point of care coordination and help with:

- Coordination of treatment appointments.
- Information about cancer, treatments and services available.
- Communication between GPs, specialists and allied health professionals.
- Access to home care, community nursing, counselling and financial support services.

Dietitian
Patients may need to be referred to a dietitian if they are experiencing weight loss from bowel changes. The Cancer Nurse Coordinator and radiation oncology nursing staff will make these referrals at any stage during or after treatment.
Central Coast Cancer Centre

**General enquires**
Phone: (02) 4320 9888

**Doctor referrals**
Fax: (02) 4320 9780