

Central Coast Cancer Centre

Radiation Oncology Service

**Information for patients undergoing
radiotherapy for lung cancer**



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

caring FOR THE **coast**

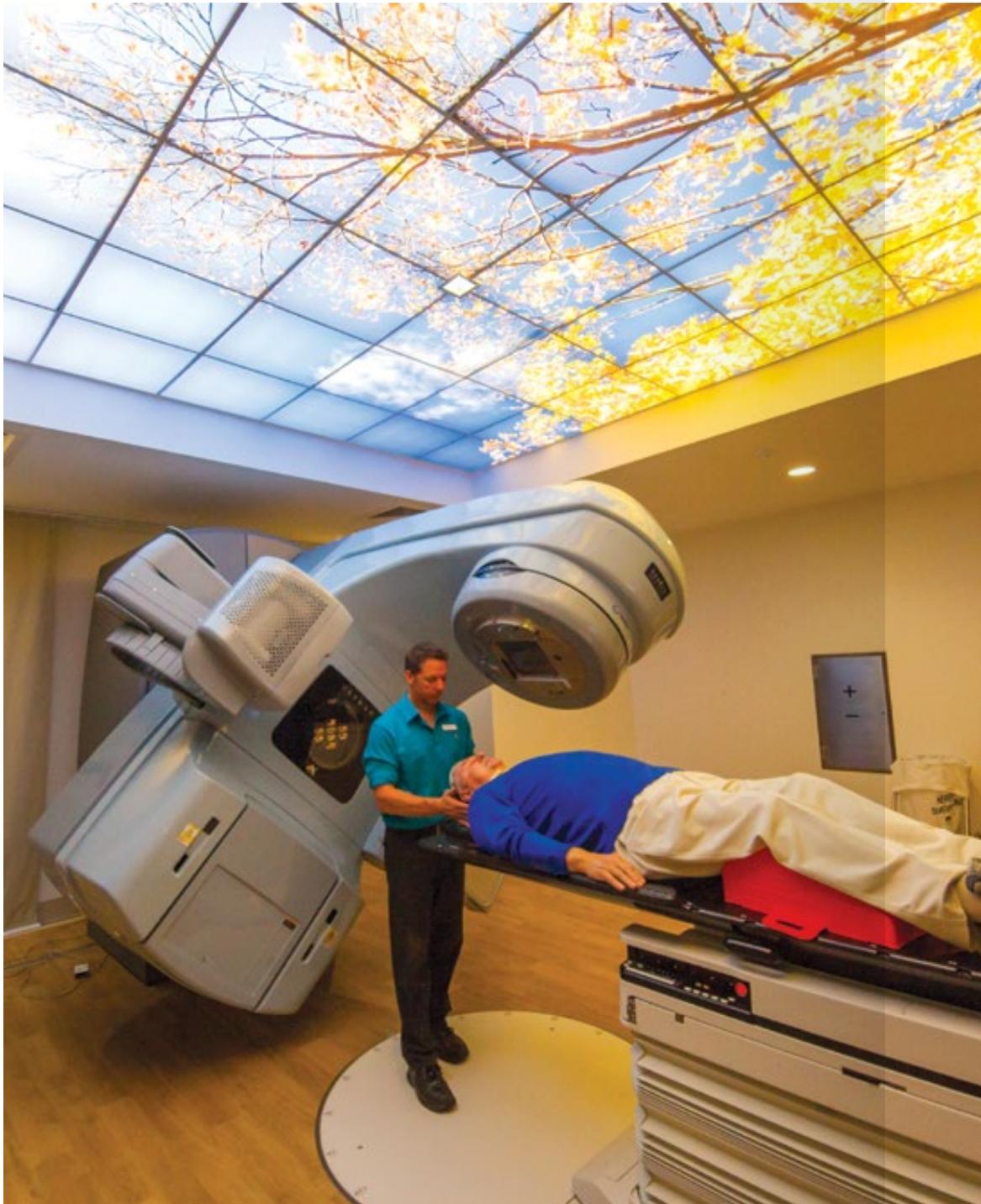


Health
Central Coast
Local Health District

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Introduction

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

This booklet should be read along with the 'Radiotherapy information for patients, families and carers' booklet, which contains information about the services and staff available at the Central Coast Cancer Centre. It also includes information on transport and parking.

Specialist Appointment Information

Date:.....

Time:.....

Location: Central Coast Cancer Centre, Gosford Hospital

Cancer Day Unit, Wyong Hospital

Radiation Oncologist:.....

Cancer Nurse Coordinator:.....





About radiotherapy for lung cancer

Radiotherapy treatment for lung cancer may be given in several different ways, including:

- on its own
- together with chemotherapy
- after surgery.

Radiotherapy is designed to destroy cancer cells and stop them from growing. The radiation dose is also 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 the most accurate radiotherapy techniques for lung cancer treatment including Intensity Modulated Radiotherapy (IMRT) to minimise the dose to normal organs, and Stereotactic Ablative Body Radiotherapy (SABR) to target small tumours more precisely.

Smoking: It is important that patients **stop smoking as soon as possible**. Continuing to smoke reduces the effectiveness of the radiation and can make side effects and recovery worse. The doctor or cancer nurse coordinator can help with options to stop smoking including referral to quitline NSW.

Initial appointment with the radiation oncologist

If the radiation oncologist recommends radiotherapy treatment, they will explain:

- The reason and benefits for using radiotherapy.
- The combination of other recommended treatments.
- The exact areas that will be targeted with radiotherapy.
- The number of daily treatments needed.
- The expected 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 recommended, you will be referred to a medical oncologist who will discuss chemotherapy and the potential side effects.

Radiation treatment plan

Total 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.

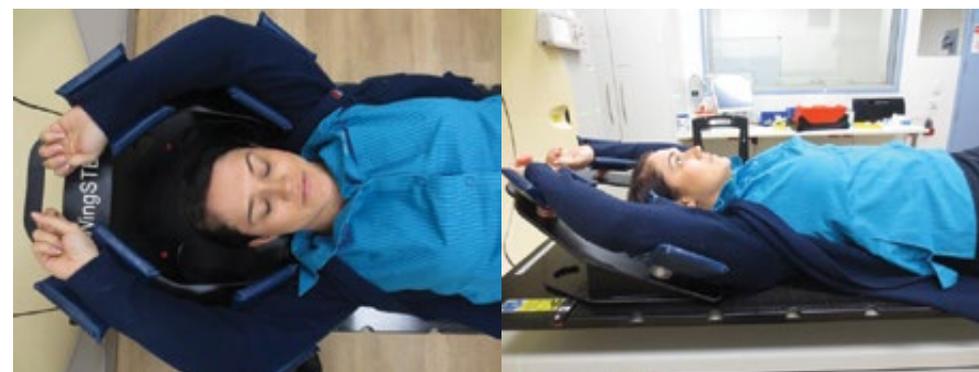
Radiotherapy planning

The radiation therapists use specialised equipment to ensure patients are in a stable and comfortable position, with arms above their head, for the planning CT and each treatment.

Once positioned, the radiation therapists may place a small monitor on the upper abdomen to help monitor breathing. Three very small permanent ink marks (tattoos) will be placed on the patient's skin as reference marks.

A CT scan is completed to create a customised radiotherapy treatment plan. This ensures that the radiation is delivered to the tumour while reducing the dose to normal tissue around it. This process often takes many days to check prior to treatment commencing.

The planning appointment takes about 60 minutes to complete and patients are able to go home straight afterwards.



Radiotherapy treatment



Radiotherapy treatments are usually Monday to Friday each week for five or six weeks in total. Each treatment takes approximately 10-20 minutes, however we suggest that patients and carers allow up to 30 minutes each day which includes waiting times.

Patients having SABR treatment will have four or five treatments over a two week period, each taking approximately one hour.

The machines have scheduled maintenance fortnightly on Thursdays, so appointment times may be changed on these days.

If chemotherapy has been recommended this will usually commence on the first day of radiotherapy. If unsure, please speak to the medical oncologist or cancer nurse coordinator about starting chemotherapy.

The radiation oncologist, or radiation oncology registrar, will see patients weekly to monitor treatment progress and answer any questions. This 'weekly treatment review' will be printed on the appointment sheet.

The radiation therapists or nurses can arrange extra medical reviews if patients or carers have any concerns.

Follow up after radiotherapy treatment

An appointment will be arranged to see the radiation oncologist after the radiotherapy finishes, typically four to six weeks after the last treatment. Your doctor will assess recovery from any side effects and the progress made towards returning to a normal routine. The doctor will also discuss the longer term follow up arrangements, which may involve other specialists such as surgeons and medical oncologists.

Side effects of radiotherapy

The Radiation Oncologist will explain the expected side effects depending on the dose and the area being treated. In general, radiotherapy to the lung is very well tolerated by patients with minimal side effects. If chemotherapy is recommended, the Medical Oncologist will explain the possible side-effects and how to best manage them.

General side effects during and shortly after treatment

Tiredness

Tiredness can start one to two weeks into treatment and last for several weeks/months after treatment has finished. The level of tiredness varies between patients, but most people are able to continue with their normal routines including work.

Side effects of radiotherapy

Expected side effects during treatment

Skin changes

Skin around the chest and back areas may become pink, dry, and itchy after the second or third week of 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.

Bronchitis

The radiation may cause mild inflammation in the major airways close to the area being treated. This may develop into a persistent cough that may require medication to manage.

Irritation (soreness) of the oesophagus

Some discomfort similar to heart burn can be experienced around the third week of treatment. This may continue for a few weeks after treatment has finished. If this irritation causes pain when eating and drinking, then pain relief and modification of diet may be required. The radiation oncologist can involve a dietitian to help manage these side effects.

Nausea and vomiting

This is a relatively uncommon side effect of modern radiotherapy, but can be easily managed. It is more likely to occur if patients are having chemotherapy. Please speak with the nursing staff or the doctor if nausea or vomiting are experienced during or after treatment.

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

Potential side effects after radiotherapy

The treatment is designed so that patients make a full recovery from radiotherapy without developing problems in the future as a result of their 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.

Hair loss

It is common for patients to lose some of the hair in the treatment area. This is temporary and likely to grow back over several months after treatment has finished. Head hair will not be affected by the radiotherapy.

Scar tissue in the oesophagus (fibrosis)

There is a small chance that radiation could cause a narrowing in the oesophagus called a stricture. This may happen months to years after radiotherapy is completed. It may require a small surgical procedure to repair which is well tolerated by most patients.

Oesophageal stenosis

Stenosis is a narrowing of the food pipe. This may happen months to years after radiotherapy is completed. It may require a small surgical procedure to repair which is well tolerated by most patients.

Inflammation of the lung

The radiotherapy is carefully planned to avoid as much lung as possible, however there is small risk (less than 5%) that part of the lung may be inflamed or scarred after radiotherapy. Patients may experience temporary shortness of breath, which may be more permanent for smokers.

Spinal cord damage (myelopathy)

There is a very small risk (less than 0.1%) of spinal cord damage when treating the lung with radiotherapy. The radiotherapy team carefully plan the treatment to avoid this.

Nerve damage (Brachial plexopathy)

The brachial plexus is a bunch of nerves positioned above the top of the lungs. Tumours at the apex of the lung are often very close to these nerves. Careful planning can usually avoid this structure, however there are instances when in order to treat the cancer properly, the nerves have to be included in the treatment field. Under these circumstances there is a small chance of damage to these nerves which can cause pain or weakness in the arm in months to come.

The Doctor should be notified immediately if any of the side effects above are experienced.

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.

Lung cancer supportive care

Cancer nurse coordinator

The Cancer Centre has a dedicated cancer nurse coordinator for patients with lung cancer. The coordinator can be contacted on (02) 4320 9824 and will be a central point for help with:

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

Dietitian

The medical or nursing staff can arrange referrals to the dietitian for help with:

- Assessing nutrition status.
- Managing side effects to help patients maintain their weight.
- Nutrition supplements or tube feeding (if required).

Social work services

The Cancer Centre has a dedicated social worker to provide patients, carers and families with assistance for psychosocial needs, or referrals to home help and support services. Services include counseling, emotional support, and assistance with financial issues, travel and accommodation.

Clinical psychology services

The Cancer Centre has a psychology service to assist patients, carers and families minimise anxiety, depression and emotional turmoil associated with a cancer diagnosis. This free service forms a crucial part of the supportive care service.

Central Coast Cancer Centre

Central Coast Cancer Centre

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Central Coast Cancer Centre Site Map



Thank you for your patience and understanding as we transform Gosford Hospital

Central Coast Cancer Centre

General enquires

Phone: (02) 4320 9888

Doctor referrals

Fax: (02) 4320 9780

www.cclhd.health.nsw.gov.au/ourservices/CCCS