

Head and neck radiotherapy patient guide

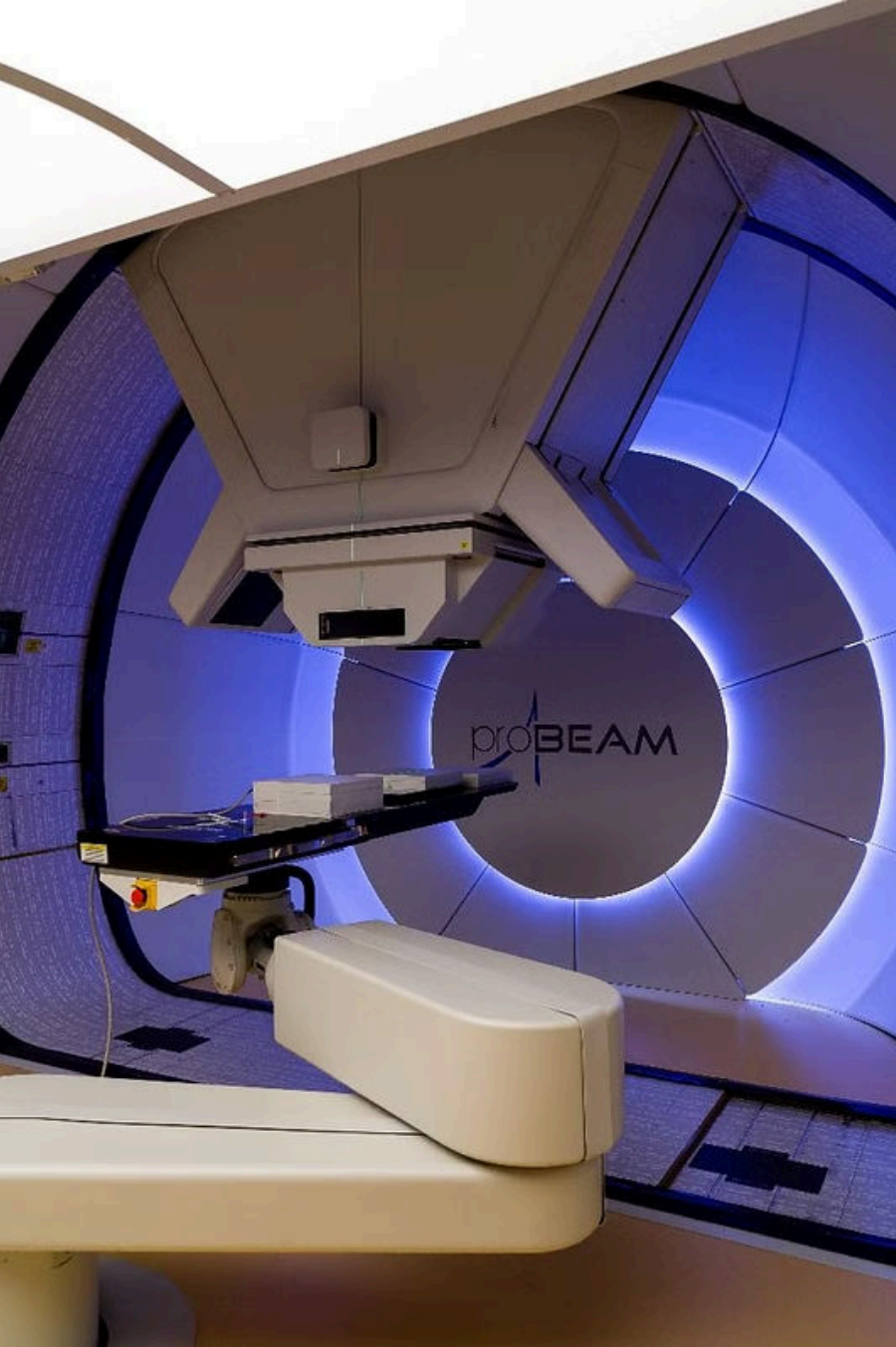
By Dr(s) Wong Ru Xin, Looi Wen Shen and Shaun Ho. Contact: frontdesk@proton.sg

This guide provides essential information for patients undergoing head and neck radiotherapy treatment. From an overview of radiotherapy to ways to manage side effects and late effects, this guide covers a wide range of topics to support and inform patients throughout their treatment.



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What is radiotherapy?

Radiotherapy utilizes high-energy x-rays or proton beam to target and destroy cancer cells while minimizing damage to normal cells. While it may cause side effects, careful planning and advanced methods reduce the risk of harming healthy tissue. Radiotherapy is a vital treatment option for head and neck cancer. It can be used alone or in combination with chemotherapy, known as chemoradiation.

X-rays are more conventional, and more widely accessible.

Some centres offer proton beam therapy. While both treatments are effective and safe and equally efficacious at tumour control, proton beam therapy may result in fewer side effects.

Chemoradiation

Chemoradiation, the primary treatment for head and neck cancer, potentiates the effects of radiotherapy. It may be used as the main treatment for locally advanced cancers, or to reduce cancer recurrence risk post-surgery. It's also effective for cancers in challenging areas such as the nasopharynx or oropharynx.

Radiotherapy for early-stage cancers

Radiotherapy can effectively treat small, localized cancers or cancers affecting hard-to-reach areas like the back of the mouth or throat. It's a viable option when surgery might affect speech and swallowing abilities, making it the main treatment in such cases.

Radiotherapy to control the cancer and reduce symptoms

If curing cancer is not possible, the focus shifts to controlling the cancer and alleviating symptoms, known as palliative treatment. This approach aims to prolong control over the cancer and relieve specific symptoms such as bleeding, swallowing, or breathing difficulties.

Steps of radiotherapy process

1. Consultation and Evaluation:

- You'll have an initial consultation with your radiation oncologist, during which your medical history, diagnosis, and treatment options will be discussed.
- Your radiation oncologist will conduct a physical examination and may order imaging tests such as CT scans, MRI, or PET scans to accurately assess the extent and location of the cancer.
- You will see a dentist for teeth check prior to radiotherapy.

1. Treatment Planning:

- A simulation session will be scheduled where you'll be positioned on a treatment table in a specific position, usually immobilized with a mask or headrest to ensure precise alignment.
- Imaging techniques such as CT scans or MRI will be used to precisely define the target area for treatment.
- Small marks may be made on your skin to guide the positioning during each treatment session.
- Your radiation oncology team will develop a personalized treatment plan based on the simulation data, determining the appropriate dose of radiation and the angles from which the radiation beams will be delivered.

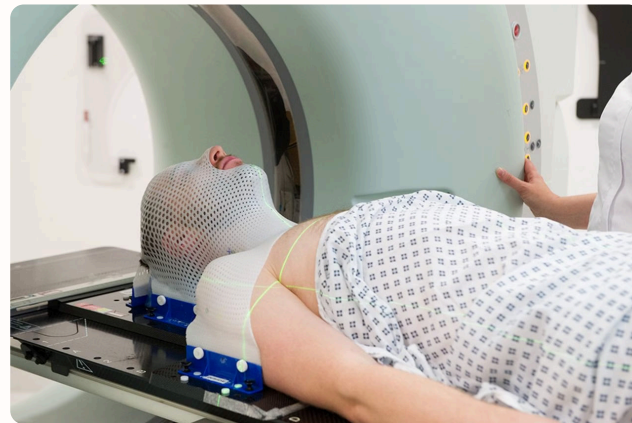
2. Treatment Sessions:

- Radiotherapy for head and neck cancer typically involves daily sessions, Monday through Friday, for several weeks. The total number of sessions varies depending on factors such as the type and stage of cancer.
- Each session usually lasts about 15-30 minutes, but the actual radiation delivery takes only a few minutes.
- You'll be positioned on the treatment table according to the marks made during the simulation session.
- During the treatment, you will be alone in the room, but your radiation therapist will monitor you from outside through cameras and intercoms.
- The radiation machine will move around you, delivering the prescribed dose of radiation to the targeted area. It's painless and similar to getting an X-ray.
- It's crucial to remain still during the treatment to ensure accurate delivery of radiation.

How radiotherapy is given

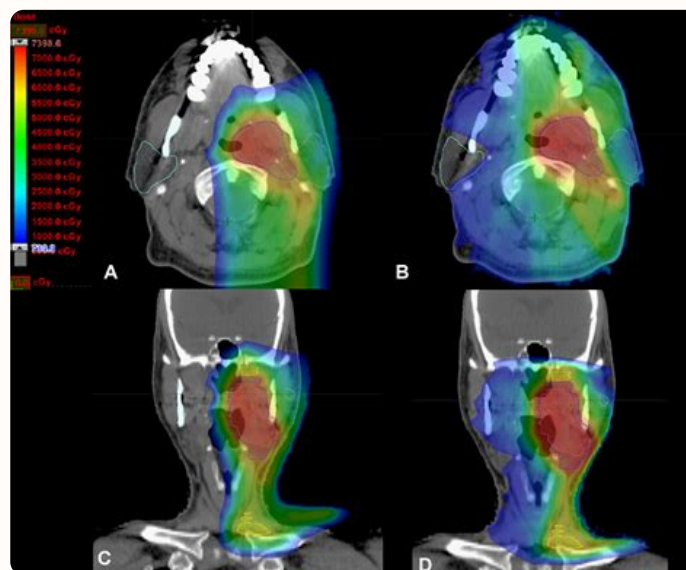
The most common method, external-beam radiotherapy, utilizes x-rays from a linear accelerator or proton beams from a cyclotron. Treatment schedules vary from 4 to 7 weeks depending on the cancer type and size. For palliative radiotherapy, a single treatment or 1 to 3 weeks of treatment may be recommended.

Patients lie on a treatment couch for up to 30 minutes per session in a treatment room. A customised face-mask and head support cushion are made to make sure the patient remains immobile for accurate radiotherapy.



Planning your radiotherapy

A simulation is required before the actual treatment. This process typically takes about 1 hour and includes a CT scan and sometimes an MRI scan to personalize the treatment. Thorough planning is essential to ensure precise targeting of the cancer and minimal impact on surrounding healthy tissues.



Managing side effects during radiotherapy

Radiotherapy can cause various side effects including skin reactions, sore mouth and throat, dry mouth, bad breath, loss of taste, hoarse voice, feeling sick, and tiredness. Understanding and following the advice provided can help manage these side effects effectively.

These side effects will start about 2-3 weeks after radiotherapy commences, and will resolve a few weeks after treatment.

You will be given

- mouth wash
- pain killers
- skin ointment
- anti-nausea tablets
- nutritional supplements.

Sometimes, a feeding tube will be inserted if swallowing is too painful. This can be removed once the pain resolves.



Types of pain killers to take

1. **Nonsteroidal Anti-Inflammatory Drugs (NSAIDs):** NSAIDs such as ibuprofen or arcoxia can relieve pain and inflammation.
2. **Acetaminophen or panadol** is very safe and simple for mild pain.
3. **Opioids:** For severe pain that is not adequately controlled with NSAIDs or acetaminophen, opioids may be prescribed. Opioids such as codeine, oxycodone, morphine, or fentanyl can provide powerful pain relief. At low doses and when used appropriately, the propensity for addiction is very low.
4. **Mouth Rinses and Oral Analgesics:** oragel, soragel, or lidocaine mouth wash.



Maintaining proper nutrition during head and neck radiotherapy is crucial for supporting your body's healing process.

Weight loss can also lead to inaccurate radiotherapy if your body contours change.

Stay Hydrated: Radiation therapy to the head and neck area can cause dry mouth (xerostomia), making it difficult to swallow. Drinking plenty of fluids throughout the day can help alleviate dryness and prevent dehydration.



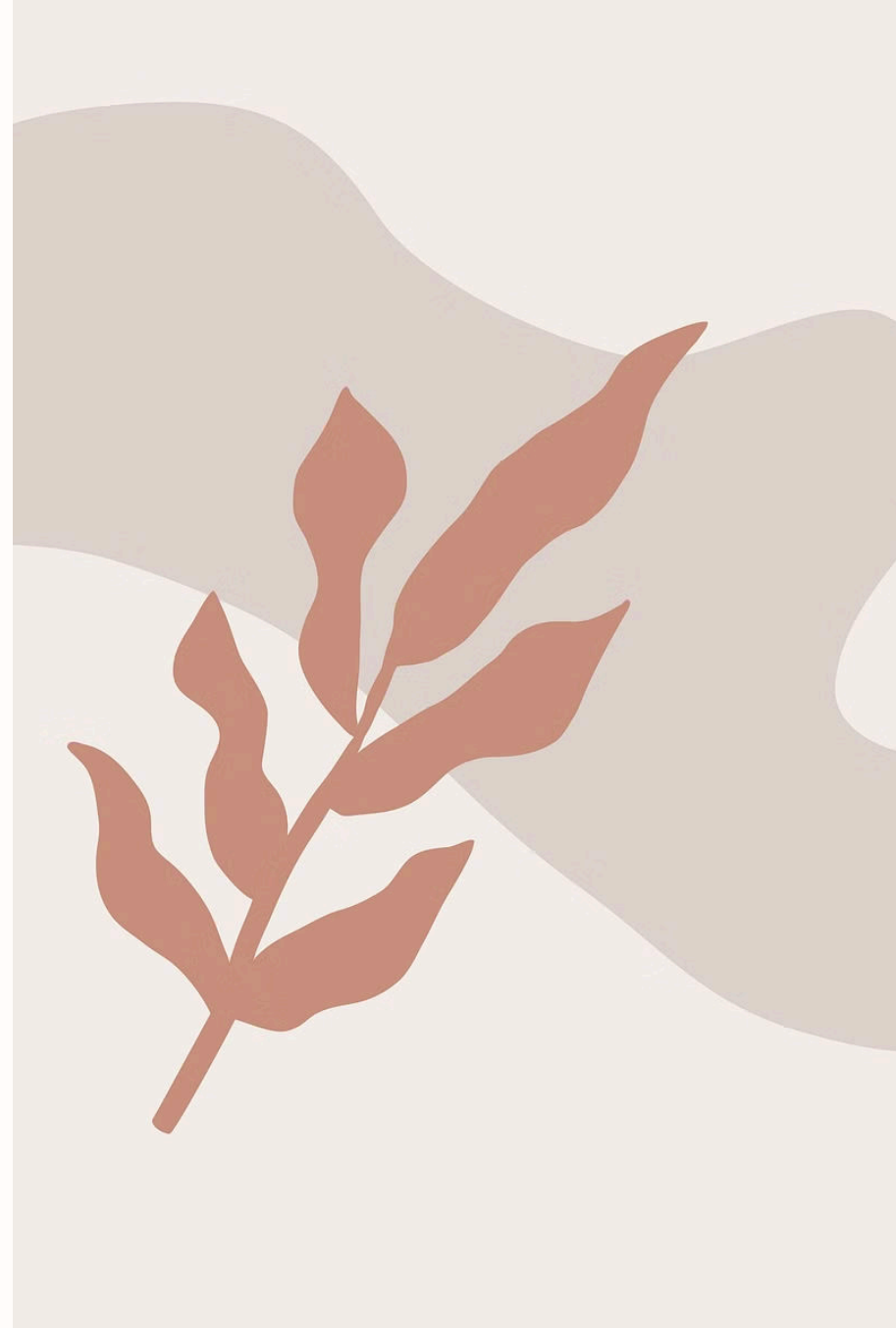
1. **Soft and Moist Foods:** Choose soft, moist foods that are easier to swallow and won't irritate your mouth or throat. Examples include soups, mashed potatoes, oatmeal, yogurt, smoothies, scrambled eggs, and cooked vegetables.
2. **Avoid Irritating Foods:** Spicy, acidic, or rough-textured foods can further irritate your mouth and throat.
3. **High-Calorie, High-Protein Foods:** Focus on consuming calorie-dense and protein-rich foods to maintain your energy levels and support tissue repair. Examples include lean meats, poultry, fish, eggs, dairy products, tofu, nuts, seeds, nut butters, and protein shakes or supplements.
4. **Frequent Small Meals:** Eating smaller, more frequent meals throughout the day may be more manageable than three large meals.
5. **Avoid Alcohol and Tobacco:** Alcohol and tobacco can further irritate your mouth and throat and may interfere with the healing process.
6. **Oral Hygiene:** Brush your teeth gently with a soft-bristled toothbrush after meals and before bedtime. Use fluoride toothpaste and rinse your mouth with a saltwater solution or prescribed mouthwash as recommended by your healthcare provider.
7. **Consult with a Dietitian:** A registered dietitian can provide personalized dietary advice based on your specific needs and treatment side effects.
8. **Supplements:** Your healthcare provider may recommend nutritional supplements if you're unable to meet your dietary needs through food alone. However, it's essential to consult with them before taking any supplements to ensure they're safe and appropriate for you.

Late effects of radiotherapy

Late effects may include a dry mouth, higher risk of tooth decay, difficulty swallowing, stiffness in the jaw, neck or shoulders, and lymphoedema. Some patients develop thyroid insufficiency. Some patients develop hearing impairment if the original tumour is near the hearing organs. Specialized healthcare providers can help manage these late effects effectively.

You will continue to see a multi-disciplinary team of specialists including

- your surgeon
- your oncologists
- ENT
- speech therapist
- dieticians
- physiotherapists
- dentists



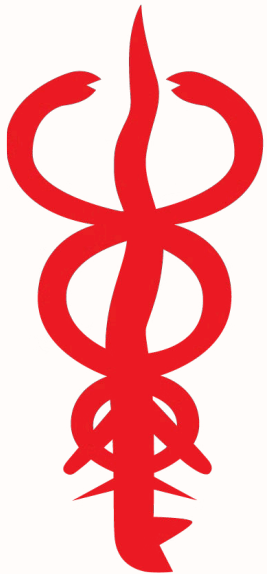
Survivorship

- Consider joining cancer support groups - for example the "New Voice Club" for patients with laryngeal cancer, **NPC Support Group**

Lim Kok Kiong

Email: kkreddot@gmail.com

- Consider joining rehabilitation programs
- Ask your radiation oncologist to recommend you.



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