

# Head and Neck

## Excludes Brain

This information is to be used in conjunction with **My Treatment Booklet**. It provides unique details about receiving radiation to the **head and neck**.

## Pathway



### 1 First specialist appointment

If your mouth is close to the treatment area your radiation oncologist may arrange a dental appointment prior to you attending ARO Orientation. This is to check your mouth and teeth are in good condition prior to starting treatment. The dentist will prescribe high fluoride toothpaste to use in the evenings. If you have a feeding tube the ARO team will support you to self-care with this.

### 2 Orientation

A patient care specialist (radiation therapist or nurse) will explain the procedure in more detail and answer any questions or concerns you may have about the process or treatment.

The patient care specialist (radiation therapist or nurse) will discuss head and neck, mouth care and general nutrition and give you a separate information sheet. A dietitian appointment will also be arranged if you have not already been referred and a malnutrition screening assessment will be completed. A specialist physiotherapist referral and/or speech and language therapist referral will also be made as needed.

### 3 Planning CT Simulation

#### Position:

You will most likely lie flat on your back with arms by your side and a support under your knees. The radiation therapists will make sure you are as comfortable as possible.

To hold you in the correct position for treatment, immobilisation equipment is made specifically for you. This typically includes a specially moulded mask and neck cushion. If you have significant facial hair this may need to be trimmed before the mask is made.

The mask is made from a thermoplastic material, which when warmed, is gently moulded over your head and shoulders. It takes 20 minutes to set. Positioning marks are drawn on your mask to help position you the same way each day for radiation therapy.

Sometimes the thought of having your head immobilised may bring about a feeling of claustrophobia. *If you are claustrophobic, please discuss this with a member of the ARO team prior to your appointment so we can provide suitable support. Please also bring any medication that helps you.*

## Scan:

You will have a CT scan in the above position.

*The best way to communicate with your mask on is to use hand signals. **Thumbs up is you are OK, thumbs down means you need assistance.** While the scan is taking place radiation therapists are outside the room watching you through a viewing window, so **if you need assistance give a wave with one of your hands.***

You may need additional scans e.g. a PET and/or MRI, which all give helpful information to plan your radiation therapy. These scans may be at a different location and with or without your immobilisation equipment. On occasion intravenous (via a vein) contrast may be used during one of these scans to highlight specific areas (additional consent for this is required).

## 4 First day of treatment

*If you are claustrophobic and were prescribed medication at the simulation/CT appointment when making the mask, please bring this medication with you to each day of treatment and use as prescribed.*

A radiation therapist will give you a tube of cream and instructions on how to apply this. This cream is designed to help reduce radiation therapy side-effects to the skin and works as a barrier rather than a moisturiser.

## 5 During treatment

Your radiation oncologist will advise you of possible side effects during and then after treatment is complete. *If your immobilisation mask ever feels uncomfortable, please let a member of the ARO team and speak to us about any concerns or changes so we can provide advice and support to meet your needs.*

## Possible short-term side effects

### Fatigue

Tiredness will likely occur. Some people continue to work while others find this too tiring.

#### Self-care:

- *Keep hydrated (try and drink 2L a day, preferably water). Minimise alcohol.*
- *Eat as well as you can. Nutrition support is provided.*
- *Exercise regularly e.g. relaxed walking three times per week can be beneficial. You can continue your usual level of activity or introduce mild exercise. Please listen to your body, do not over exert yourself, and rest when you feel the need.*
- *Try to get a good nights' sleep.*

## Skin reaction

Skin colour will progressively redden or darken and is often first noticed in the second week of treatment.

Skin is likely to become increasingly irritated, itchy and tender. There may be patches of skin that peel. This is most likely to occur behind the ear (if treated) or in an area where the target lies close to the skin surface.

### *Self-care:*

- Apply the recommended gel or cream thinly to the clean and dry treatment area twice a day during, **and for two weeks after radiation therapy has finished**. Allow 5 minutes to dry to prevent clothes staining. Please do not use other products on your skin at this time.
- When washing the treatment area, use warm water, avoid scrubbing, and gently pat dry. If using soap, use mild soap such as Dove extra sensitive or Simple soap, which you can buy from the supermarket. You can use normal shampoo/conditioner.
- Do not apply heating or cooling devices in the treatment area such as wheat or ice packs. Do not use a hairdryer on the treatment area.
- Avoid wet shaving/waxing in the treatment area during the course of treatment and until any skin reaction has completely gone. An electric razor is fine.
- Avoid hot pools, spa pools, chlorinated pools and saunas while on treatment and until any skin reaction has completely gone.
- Be aware of the clothing you wear over the treatment area:
  - Wear loose fitting, soft, cotton clothing.
  - Keep the treatment area protected from the sun and wind.
- Do not apply sunblock to the treatment area during radiation therapy. Following radiation therapy, once skin reactions are completely gone this area will **always** be more sensitive to the sun. Please wear a hat (cover) or apply at least 30+ SPF (sun protection factor).

## Saliva reduction (xerostomia) and/or thickening of saliva

### Inflammation of the lining of the mouth (oral mucositis)

### Inflammation of your oesophagus (oesophagitis)

All patients will experience some discomfort in swallowing. Some may have an increased cough, sometimes with greater/thicker sputum production or blood streaking.

### *Self-care for the reactions above:*

- Follow advice on the **Head and Neck: Mouth Care and General Nutrition** information sheet. You will see a nurse and dietitian weekly.
- These side effects require close monitoring so please communicate frequently with your ARO team.
- A humidifier may help with thick mucus/saliva and can be hired during and after treatment. Please discuss with a member of the ARO team.

## Hair loss

May occur and be a bit patchy depending on the treatment area (e.g. back lower head).

## Hearing

Radiation near the ear can result in hearing changes/loss and ringing in the ears.

### 6 Last week of treatment

Please refer to My Treatment Booklet.

On your last day you will see a nurse or doctor.

### 7 After treatment

Please continue with the current management and self-care of side effects for at least 2-3 weeks after treatment. *Ensure your dentist is aware you have received radiation therapy to the head and neck before dental care and have regular dental checks and prompt treatment of dental decay.*

## Possible long-term side effects

- Skin breakdown can occur. If required a district nurse will be organised.
- Skin colour and texture can change slightly.
- You may have less saliva or a permanent dry mouth, particularly if both sides of the face or neck are in the treatment area. Continue to use mouth moisturising products.
- Radiation near the eye may result in cataracts (treated with lens replacements) or a condition called dry eye, due to damage of the tear gland. Very rarely treatment near the eye can result in decreased vision due to damage of the retina or optic nerves.
- Radiation near the ear can result in permanent hearing damage. Your radiation oncologist will discuss this if you are at risk.
- Less than 5% of patients develop problems with healing in the bone (e.g. jaw) or soft tissues. This is often precipitated by trauma (such as dental extraction) in the treatment area and can occur many years after treatment.
- Rarely patients develop a mucosal ulcer (lining of mouth or neck) which requires additional interventions to help healing.
- An extremely small risk of damage to the nerves and/or the spinal cord.
- A small risk of damage to blood vessels in the neck and high blood pressure. In some patients this may require treatment with blood thinning tablets such as aspirin and usually only noticed years after therapy. We advise regular blood pressure monitoring by your GP.
- A risk of developing different cancers. This is rare and usually many years after radiation.

#### Self-care:

- Visit Support Services on **[www.aro.co.nz](http://www.aro.co.nz)** for additional services before, during and after treatment.