



Patient information on radiotherapy for upper head and neck cancer

Side effects of radiotherapy to the head and neck (nasopharynx, nasal cavity, sinuses, salivary glands, ear, and the neck)

This leaflet is designed to help you learn about your radiotherapy treatment. This information leaflet is about **external beam radiotherapy for upper head and neck cancer**. This leaflet will help you understand:

- the radiotherapy side effects you might experience
- how best to care for yourself during and after treatment

The information combines guidance from our specialist centres to give you a clear overall picture. Remember, your treatment is tailored for you, and your team will advise you of any differences that apply to your care.

Some of the side effects described below are more common depending on the area being treated. We have tried to make this clear in this information sheet. Ask the team treating you if you need more information.

What are the side effects and how do I manage them?

Radiotherapy is a localised treatment, which means that most of the side effects occur only in the part of your body that is being treated and can vary from person to person. Side effects of radiotherapy are described as:

- Early and short-term - which usually start during your course of radiotherapy and usually resolve within two to six months after finishing radiotherapy.
- Late and long term- These are side effects that may happen many months or years after radiotherapy, and may be permanent.

Side effects are put into categories to explain how likely you are to get them:

Likelihood	How many people will get these side effects?
Expected	50 to 100 people out of 100 people
Common	10 to 50 people out of 100 people
Less Common	less than 10 people out of 100 people
Rare	less than 1 person out of 100 people

Your care team will discuss these with you and give you other advice tailored to your treatment. You may not get all the side effects described in this leaflet.



As radiotherapy treatment to the head and neck region can cause swelling, soreness and pain, it is important that you take care of your skin and pay attention to what you are eating and drinking.

How should I look after my skin during and after treatment?

Advice to reduce friction to the treatment area:

- Wash the skin gently with soap and tepid water and gently pat dry
- Wear loose soft cotton clothing around and on the treatment area
- Avoid tight or nylon garments
- Avoid rubbing the area
- Avoid heating, for example, hot water bottles and microwaveable wheat bags
- Avoid using a hairdryer in the area (the Therapeutic Radiographers giving you the treatment can advise you on where this is)
- Avoid cooling the skin (for example cold pads/ice)
- Please do not wet shave and avoid/reduce dry shaving, if possible
- Avoid wax for hair removal and all hair removing creams/products
- Avoid using adhesive tape

Advice to reduce irritation to the treatment area:

- Use your preferred moisturiser sparingly and gently rub into the skin
- Stop using moisturiser if any irritation/soreness develops or if the skin breaks
- **DO NOT** wipe the area clean of the moisturiser prior to treatment, as this will cause more friction to the skin
- Avoid makeup, hair dye, perfumes and aftershaves if known to contain alcohol
- If you like to swim, reduce the number of times a week you go swimming. This is to reduce irritation to the treatment area, as chlorinated water may have a drying effect on the skin. Ensure that after swimming you shower, to remove chlorine
- Leave the area being treated open to the air as much as possible
- Radiotherapy causes changes to the skin that always makes it more sensitive to the sun. Your skin will damage more easily and take longer to heal. Avoid exposing the treatment area to strong sunlight, both during and after your course of radiotherapy treatment. After completion of radiotherapy treatment, and once your skin reaction has settled, you are advised to always use a good quality, high factor sun protection cream. **At least factor 50 (minimum UVA 5-star rating)** in the treated area, especially during the summer months and if you are travelling to a hot climate. Some sun protection can be prescribed by your GP if you have had head and neck radiotherapy.

Therapeutic Radiographers, nurses or Clinical Nurse Specialists. You can find Skin care advice from the Society of Radiographers [here](#) or by going to:



<https://www.sor.org/news/radiotherapy/scor-updates-radiation-dermatitis-guidelines>

What should I eat and drink during treatment?

- It is important that you continue to eat during your treatment.
- It is important to drink plenty of fluids, at least four to five pints (two and a half litres daily). This can include: water, milk, tea and coffee, herbal teas, milkshakes, soups, jellies, custard, and chocolate drinks made with milk.

Drinks should not be served too hot.

- Avoid drinking alcohol, particularly spirits.
- Avoid very hot (in temperature), spicy food, and coarse or rough texture and dry food, e.g., toast. Avoid ice cream as it is too cold, but you may eat it at room temperature. Avoid citric juices or foods containing citric acid, e.g., tomato soup, tomatoes, oranges, lemons, etc.
- Some medicines such as morphine or codeine-based painkillers can slow the bowels down and cause constipation, please tell the radiotherapy team as soon as possible if this happens. You can be given medicine to help with the constipation.

What are the early and short-term side effects?

Expected (this means 50 to 100 out of 100 people)

- **Tiredness**

Advice: Rest when needed, break up activities into smaller tasks, and try light exercise (if approved by your doctor). Try to drink plenty of fluids, such as water and herbal tea.

- **Skin soreness, itching, blistering and colour changes in treatment area**

- Those with white or lighter skin might find the skin colour changes to pink, red, or darker than surrounding area. Those with brown skin might find the skin colour changes to maroon or darker than surrounding area. Those with black skin might find the skin colour changes to darker than surrounding area the skin colour may change to yellow, purple or grey. The skin in the area being treated with radiotherapy can become sore, dry, and itchy. You may get some peeling of the skin. Some patients experience peeling of the skin that is moist and can be very sore. If the skin behind the ear is included in the treatment area, it can become painful.

- **Red or watery eyes** – avoid rubbing your eyes; you could try saline eye drops.

- **Irritation in the lining of the nose or blocked nose** – avoid picking this area or over-blowing your nose.



- **Mouth ulcers** – a good oral hygiene regime is important to follow. Speak to your team about fluoride toothpaste and mouthwash.
- **Pain in the mouth and/or throat which can cause problems with swallowing** – speak to your team and review your pain relief medication regularly.
- **Loss or change of taste**
- **Hair loss in treatment area**
- **Worry, feeling scared, low mood and feeling fed up.** It is very common to experience feelings of anxiety and low mood. If you can, speak with family, friends, or your team and share how you are feeling. There are some other numbers of support services at the end of this leaflet.
- **Not being able to get to sleep or waking up a lot in the night,** because of worry

Common (this means 10 to 50 out of 100 people)

- **Changes in or loss of sense of smell**
- **Temporary hearing loss and/or earache**
- **Dry mouth**
- **Mouth infections, including oral thrush**
- **Voice changes**
- **Thickened and sticky saliva from that might be difficult to swallow,** try to keep drinking plenty of water and the other recommended drinks.
- **Feeling sick**
- **Being sick**
- **Not wanting to eat as much as usual**
- **Weight loss**
- **Finding it hard to swallow** which may require temporary placement of a feeding tube, either at the start of treatment or during treatment, to support nutrition and hydration. This may mean that you are admitted to hospital and spend some time there.

Less common (this means less than 10 people in 100 people)

- **Chest infection,** which may be due to food and/or secretions going down the wind pipe instead of the food pipe
- **Dehydration** because of drinking less
- **Being sick**
- **Temporary changes to the spinal cord** presenting as a sudden electric shock-like sensation on bending the neck. This may occur three to six months after treatment and is called Lhermitte's sign



There may be other rare risks that, if relevant, will be discussed with you, along with other information specific to your treatment plan.

What are the late and long-term side effects?

These are side effects that may happen many months or years after radiotherapy and might not get better, medicine can sometimes make them feel better.

Expected (this means 50 to 100 out of 100 people)

- **Skin colour change in the treatment area** – usually lighter or darker in any skin tone
- **Skin, chin and soft-tissue swelling – called Lymphoedema**

Common (this means 10 to 50 out of 100 people)

- **Changes to how the skin looks and feels**– thicker or thinner skin
- **Small visible blood vessels in the treatment area**, which look like spidery marks. This is called Telangiectasia.
- **Hair loss in the treatment area**, or patchy re-growth
- **Permanent dryness of nose**
- **Nasal crusting**
- **Dry mouth** this might cause problems with eating and intimate relationships
- **Change in taste or loss of taste** – with possibility of some recovery over 18 months. After your mouth is no longer sore, you can try to add strong flavours like garlic and herbs to food to make it more attractive, and to try and stimulate your taste buds.
- **Under-active thyroid gland, which may require you to take medication**
- **Clouding in the lens of the eye**, called a cataract, which may require surgery to make better

Less common (this means less than 10 people in 100 people)

- **Dry eye**
- **Eye damage and they eye looking different**
- **Fluid coming out of the nose** called nasal regurgitation
- **Loss of smell**
- **Hearing loss or hearing changes**
- **Dental problems** – It is important that you continue to have regular dental checks after treatment. For more information see:
<https://www.macmillan.org.uk/cancer-information-and-support/impacts-of-cancer/mouth-care-after-head-and-neck-cancer-treatment>



- **Difficulty opening your mouth** this might cause problems with eating and intimate relationships and is called Trismus
- **Voice changes**
- **Swallowing problems** – with risk of long-term/permanent feeding tube requirement
- **Increased risk of stroke**
- **Your pituitary gland not producing enough hormones**, which might require medication
- **Damage to the jawbone** called osteoradionecrosis

Rare (this means less than 1 person in 100 people)

- **Permanent changes to brainstem, spinal cord and nerves to the face, arm or hand**
- **Damage to a small area of the brain** which can not be repaired
- **A different cancer in the treatment area**

There may be other rare risks that, if relevant, will be discussed with you, along with other information specific to your treatment plan.

We understand that some of these side effects sound very worrying, it is important to remember that the advantage of giving you radiotherapy outweighs any of the risks. Specific risks are considered for each individual and will be discussed with you if they differ from those above.

Where can I get more advice and support?

For further advice or help, please refer to:

- **Your Radiotherapy Team:** They can provide more information tailored to your individual treatment plan during your treatment. If you are having any problems related to your radiotherapy after treatment, please contact your radiotherapy team.
- **How to contact your radiotherapy team:** The numbers are given to you at the beginning of your radiotherapy. If you can't find the numbers, please ask for them and then keep them handy in case you need urgent advice. You will also be given contact numbers in the information given to you when you finish your radiotherapy treatment.
- **National Support Services:**

Cancer support charities such as Macmillan and Maggie's, offer information, counselling, and support groups.

- Macmillan website: www.macmillan.org.uk



- Macmillan Support Line: [0808 808 0000](tel:08088080000)
- Maggie's: www.maggies.org
- Outpatients for LGBTQI+ patients: www.outpatients.org.uk
- The Mouth Cancer Foundation: www.mouthcancerfoundation.org
- Changing Faces: www.changingfaces.org.uk
- Salivary Gland Cancer UK: www.salivaryglandcancer.uk
- The Swallows, Head and Neck Cancer Support:
www.theswallows.org.uk
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This leaflet has combined information from our specialist radiotherapy centres. It provides a comprehensive guide on what to expect during and after your radiotherapy treatment. While every patient's experience is unique, the key points above should help you prepare and know when to seek help. Always follow the specific instructions provided by your healthcare team.

Please remember: this document is for general information purposes. For personal advice, refer to the instructions and support offered by your own treatment team.

We have worked with patients to write this information. We welcome your feedback on this information leaflet. If you would like to provide us with anonymous feedback to improve this information, please complete a form by scanning the QR code or clicking on the link:



<https://forms.office.com/e/6spj6B4HQk>

For more information about radiotherapy, please see our website: eastofenglandradiotherapynetwork.nhs.uk and click on 'Information for patients'.