

ORAL HEALTH CARE FOR HEAD AND NECK CANCER PATIENTS

Your guide to looking
after your mouth during
your cancer treatment.



Mouth Cancer
FOUNDATION

Awareness and Support

INTRODUCTION

Starting your treatment journey can be daunting, but everyone is with you every step of the way.

Your journey and treatment is tailored to you. Some patients benefit from one type of treatment, others from a combination of multiple treatments. They include surgery, chemotherapy, radiotherapy, immunotherapy. You will be advised what is best for you.

Given the cancer is in the head and neck, the treatment/its side effects are likely to affect your mouth. This information booklet is designed to help you manage your oral health; especially given the side effects you may experience.

If you are struggling with anything, you must seek advice from your doctors/ oncology team looking after you.

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WHAT TO DO BEFORE STARTING YOUR TREATMENT

Your mouth may go through many changes during your journey. To help optimise your mouth before treatment, you can carry out a few things in your routine to help:

1. **Dental Check Up:** It is important that your mouth is as healthy as possible. If there is any issue that needs to be seen to, this should be carried out before the cancer treatment starts.
2. The dentist can prescribe a **high fluoride toothpaste**. Use this to help protect your teeth. Further down your treatment journey, keep in contact with your dentist as they may provide other fluoride supplements if required.
3. Brush **twice a day** and clean in between your teeth. Ask the dentist to show you how this is done if you're unsure. Keep in contact with your dentist as they may change your routine if required.

WHAT TO DO BEFORE STARTING YOUR TREATMENT

Your dentist may need to discuss all your teeth with you and they may recommend some to be removed – especially if you are having radiotherapy.

This is unfortunately because the radiotherapy affects the bone in your mouth, and may cause complications for your teeth/mouth in the future. Your dentist will be able to discuss this in detail with you and you can ask the team if you have any questions.

If you are struggling with your dental care, make sure to ask your dentist for advice. There is more on mouth care later

WHAT TO EXPECT WHILST IN HOSPITAL AFTER SURGERY

The extent of surgery you have varies and that is something you can discuss with your surgical team. You will understandably feel discomfort, sore and swollen afterwards.

The team will help manage this as you recover.

BASIC MOUTH CARE

Mouth care is something that happens gradually after surgery. It starts off simply:

- Wet sponges
- Mouthwash
- Suction

NEXT STEPS

Ask your doctor when it is suitable for you to start brushing your teeth with a fluoride toothpaste. Try and maintain the mouth care habits as you did before. On discharge, you will usually be provided with mouthwash and sponges to go home with.

The hospital team are more than happy to give you advice, just ask

WHAT TO EXPECT WITH CHEMOTHERAPY AND RADIOTHERAPY

If you have chemotherapy and/or radiotherapy, there are other side effects you may experience. These can be difficult to manage but the oncology/surgical team can talk you through this.

CHEMOTHERAPY

Chemotherapy is a medicine, usually given through a vein, used to treat/manage the cancer. The side effects depend on many things like which combination of medicines are given. You can find your specific medicine on the Cancer Net UK website and search for the side effects linked to your particular medicine.

Chemotherapy affects the lining of the mouth and can cause inflammation/irritation. This can lead to side effects (see next page).

You may have one, both or neither of these treatment options, so speak to your oncologist about your specific treatment plan

WHAT TO EXPECT WITH CHEMOTHERAPY AND RADIOTHERAPY

RADIOTHERAPY

Radiotherapy uses a beam of energy to target the cancer. Some nearby normal cells can be damaged too, which causes side effects.

These are usually short-term as the cells recover, however can sometimes be long term.

COMMON SIDE EFFECTS

- Sore mouth (oral mucositis)
- Dry mouth
- Nausea and Sickness
- Thick Saliva/Mucous
- Jaw stiffness
- Jaw bone changes
- Changes in the mouth

We will also discuss good mouth care habits to easily and comfortably keep your mouth as healthy as possible

SORE MOUTH (ORAL MUCOSITIS)

You may feel as though your mouth is sore and dry. You may feel a burning sensation when you eat and you may notice a thicker saliva. You may also notice your mouth is red.

Please inform your medical team if you notice this, especially if it affecting your eating and drinking. It can be uncomfortable, however, these are some ways to manage your mouth:

Do

- Eat soft, colder foods
- Keep food moist with yogurt, sauce, gravy
- Drink with a straw
- Suck ice/ice lollies/sugar free sweets
- Warm salt-water rinses: 1 tsp salt: 1-pint warm water
- Use an oral barrier gel; ask the doctors which brand
- Brush your teeth gently 2-3 times a day with a soft toothbrush. If your mouth is too sore, try cotton tips/foam sticks
- Mouthwash: Difflam is a painkiller, Corsodyl is an antiseptic mouthwash. Others can be prescribed- Ask before using!
- If you find your mouth is too sore, you can try a gauze/sponge soaked in Corsodyl mouthwash or warm salt water to clean your mouth
- Keep lips well moisturised

Please check with your team if you are unsure which products to be using

SORE MOUTH (ORAL MUCOSITIS)

Don't

- Drink alcohol/Smoke tobacco/ Use alcohol containing mouthwash
- Wear your dentures, especially if ill fitting
- Floss if your platelet count is low- check with your doctor. You could try a gentle irrigation instead e.g. with a WaterPik
- Avoid whitening toothpastes. Avoid toothpastes with Sodium Laurel Sulphate
- Avoid spicy, hot, acidic food as they can be uncomfortable
- Have boiled sweets/Sharp food that can cut your mouth as this can cause blistering/ulcers/more soreness

SORE MOUTH AND RADIOTHERAPY

If you are having radiotherapy, you may notice sore mouth starting halfway through your treatment and it can be worse towards the end.

It can last for up to 10 days after treatment finishes, but most people notice an improvement in this up to 8 weeks post treatment.

*Corsodyl mouthwash can make symptoms worse if you are having radiotherapy.
Please use warm salt water rinses only*

DRY MOUTH

This can be a common side effect of treatment and can be uncomfortable to manage. If you are struggling to eat or drink well, please inform your medical team.

Here are some management tips:

Frequent sips of water.
Avoid fizzy drinks.
Try iced cucumber/
mint water

Diffiam spray/
mouthwash

Artificial saliva
substitutes: See on
next page for some
suggestions

Humidifiers in your
room

Nebulisers to
reduce thick saliva.
Ask your team if
this may be suitable
for you

Keep lips moist
with lip balm such
as Vaseline

Ask your GP if your
regular medications
can cause dry
mouth

Oral barrier gel: ask
your medical team
for an advised
brand

Avoid snacking on
sugary foods as
this, with a dry
mouth, can
increase your risk of
tooth decay

DRY MOUTH

Below is a table from the Macmillan website, giving information about saliva substitutes that you could try.

Table of artificial saliva products for a dry mouth

Product name (manufacturer)	What form does it come in?	Is it available on the NHS?	Can you buy it from a chemist?	What is the pH value?	Does it contain fluoride?	Does it contain animal ingredients?
AS Saliva Orthana® (AS Pharma)	Oral spray 50ml	Yes	Yes	Neutral	Yes	Pork
	Lozenges (30)	Yes	Yes	Neutral	No	Pork
Biotène® Oralbalance (GSK)	Saliva replacement gel 50g	Yes	Yes	Neutral	No	A protein produced by animals
BioXtra® Products (RIS Products)	Moisturising gel 40ml	Yes	Yes	Neutral	No	Cow's milk
	Gel mouth spray 50ml	Yes	Yes	Neutral	Yes	Cow's milk
	Toothpaste 50ml	No	Yes	Neutral	Yes	Cow's milk
	Mouth rinse 250ml	No	Yes	Neutral	Yes	Cow's milk
Glandosane® (Fresenius Kabi)	Aerosol spray 50ml (lemon, neutral, peppermint)	Yes	Yes	Neutral	No	No
Saliveze® (Wyvern)	Oral spray 50ml	Yes	Yes	Neutral	No	No
SST® Saliva Stimulating Tablets (Medac)	Tablets (100)	Yes	Yes	Acidic – avoid if you have your own teeth	No	No
Xerotin® (SpePharm)	Oral spray 100ml	Yes	Yes	Neutral	No	No

Ask your medical team which artificial saliva product they recommend if you are unsure.

DRY MOUTH

Do

- Eat soft, colder foods
- Keep food moist with yogurt, sauce, gravy
- Frequent sips of water
- Suck ice/ice lollies/sugar free sweets/chew sugar free chewing gum
- Warm salt water rinses - 1 tsp salt, 1 pint of warm water

Don't

- Drink alcohol/Smoke tobacco
- Use alcohol containing mouthwash
- Wear your dentures, especially if ill-fitting
- Avoid spicy, hot, acidic food as they can be uncomfortable
- Avoid sticky foods
- Avoid caffeine
- Have boiled sweets/Sharp food that can cut your mouth as this can cause blistering/ulcers/ soreness

Please refer to the previous page regarding artificial saliva substitutes

NAUSEA AND SICKNESS

Chemotherapy can often cause nausea, sickness and poor appetite. The priority is to help manage this in order for you to continue nourishing your body as best you can during your treatment journey.

There are general tips online on how to best take care of yourself e.g. the Cancer Net UK website. For the mouth, there are few things to be aware of:

Whilst it is good to avoid fizzy drinks to reduce the risk of tooth decay, if this is the only thing helping you stay well, this takes priority.

Wait 1 hour after the vomiting episode to brush your teeth. Vomit is acidic and can slowly wear your teeth down. Teeth take around 1 hour to recover after an acid attack.

To remove the bad taste of vomit, you can use a mouth wash, use a tongue scraper and chew a sugar free chewing gum.

Ask your dentist for a high fluoride toothpaste to help protect your teeth.

Maintain good mouth care habits as explained earlier.

Ask your medical team about anti-sickness medication if needed.

THICK SALIVA/ MUCOUS

Changes in the mouth

Radiotherapy can change the thickness of your saliva (spit). It can become thicker or more stringy/sticky, like mucus. This may build up in the mouth or throat as it does not flow around the mouth as well.

Help

To help clear this, you can try a sodium bicarbonate mouthwash: ½ teaspoon salt and 2 tablespoons of sodium bicarbonate dissolved in 4 cups of water.

Follow- Up

Follow with a plain water rinse to make sure the mouthwash has been cleared from your mouth and not swallowed

JAW STIFFNESS – ‘TRISMUS’

Radiotherapy or surgery to the head and neck area can cause jaw stiffness, which can develop a few weeks or sometimes months after treatment.

The amount of stiffness varies from person to person. Your jaw may feel achy and you may notice you cannot open as wide as you did before.

Tell your medical team if you have jaw stiffness or pain, even if it is mild. It often goes unnoticed and without treatment, jaw stiffness can get worse. It is best to start treatment as soon as possible. You will usually be referred to a speech and language therapist or physiotherapist for management

This can be difficult to treat so perseverance is important. These exercises may help:

Place wooden spatulas or tongue depressors between your upper and lower front teeth for a certain amount of time each day. Increasing the number of spatulas you put into your mouth over time will gradually stretch the jaw muscles. Your medical team should supply these

Open and close your mouth as far as possible without causing pain; repeat 20 times.

Passive motion device: this is a device you could research into buying/ask your team more about

Contact your team if you are getting pain or having trouble eating and drinking.

JAW BONE CHANGES: OSTEORADIONECCROSIS AND OSTEOMYELITIS

Radiotherapy reduces the blood supply/nutrition to the jaw bone in and around the target area. This can cause the bone to die. This is called-
osteoradionecrosis.

This can happen unexpectedly or as a result of trauma or infection.

If this occurs, you may notice a loose piece of bone, pain, swelling, a heaviness in the jaw, numbness. Tell your medical team about this ASAP.

There are ways to help manage this and treatment depends on the extent of the damaged jaw bone.

If this area of dead bone develops an infection (Osteomyelitis), you may notice a swelling, fever, bad taste, or you may feel unwell. If this happens, you should contact your team immediately or go to A&E

Please do not hesitate to contact your team if you are worried about this

JAW BONE CHANGES: OSTEORADIONECCROSIS AND OSTEOMYELITIS

To minimise the risk of this happening:

Do

- Visit the dentist before you start treatment: see beginning of booklet
- Visit the dentist regularly
- Look after your mouth with a good oral hygiene regime
- Have a balanced diet
- See a specialist dentist/surgeon if you need a tooth removed during/after radiotherapy so they can plan treatment to reduce risk of osteoradionecrosis

Don't

- Smoke
- Wear your dentures if ill fitting
- Have boiled sweets/Sharp food that can cut your mouth as this can cause blistering/ulcers/ soreness
- Have sugary foods as they increase your risk of cavities and therefore possible infection

CHANGES IN THE MOUTH

Chemotherapy & Radiotherapy affect your immune system and it's ability to fight infections. You can become more susceptible to infections, such as oral thrush (candidiasis) or cold sores (herpes simplex).

INSPECT YOUR MOUTH DAILY!

Inform your medical team if you notice:

- White spots
- White coated tongue
- Blisters/ Ulcers
- Bleeding
- Red areas

CHANGE OF TASTE

- This may take time to come back. You can try warm salt water rinses to try and help this. If you are struggling, inform your medical team

BURNING MOUTH

- This can be difficult to manage. Avoid hot/spicy foods and keep a food diary to help identify what makes it worse

MOUTH CARE REGIME

Looking after your mouth is very important before, during and after your treatment.

With these treatments, your risk of developing cavities in the teeth is higher. Below is a good regime to follow:

- Use a **soft toothbrush to start** with. Once comfortable, use your normal toothbrush. Check with your dentist/ medical team if unsure.
- Brush at least **twice a day**: once at night and at least one other time.
- Use **high fluoride** toothpaste.
- Clean all surfaces of your **teeth and tongue** gently for 2-3 minutes. Take care to **massage along the gums** as well
- Clean **in between your teeth** once a day
- **Spit don't rinse** to allow the fluoride to stay around your teeth longer. Fluoride helps strengthen the teeth
- Use a high fluoride mouthwash, alcohol free. Use **after food/different time to brushing**. If this is too sore, use warm saltwater rinses instead.
- If you wear dentures, clean these separately as per dentist's instructions.

Regular visits to the dentist are important

MOUTH CARE - EXTRA TIPS

If your mouth is too sore, try a cotton tip/foam stick instead of a toothbrush.

Your dentist can provide fluoride supplements if needed.

Try avoiding sugary foods as much as possible to help reduce risk of cavities.

Floss as advised by your dentist/oncology team. Do not floss if your platelet count is too low. You could try a gentle irrigation instead eg WaterPik.- check with your oncology team.

Bad breath is usually helped by improving mouth care. If you find that the bad breath is not improving with cleaning, inform your medical/dental team as there may be an infection

Avoid toothpastes that contain SLS (Sodium Lauryl Sulphate) and whitening/abrasive toothpastes, especially if you have a sore mouth.

If you wear the special type of denture (an obturator) follow the hygiene advice you are given.

Please ask if you are unsure

LONG TERM CARE

- Unfortunately, the risk of developing dental problems is usually long term after cancer treatment.
- It is very important to maintain good oral hygiene practise and reduce the number of times in a day you have sugary foods/drinks. This is to avoid developing cavities and infection.
- You should visit the dentist regularly: they will decide how often they need to see you.
- If you smoke, chew betel nut/pan or drink alcohol in excess, try your best to stop this habit. You can speak to your oncology/dental team or the GP- they can direct you to services that can help you stop the habit if you feel you would like this. **Stopping these habits is also very important to prevent the cancer from coming back**

USEFUL RESOURCES

- Remember all of your healthcare team are here to help.
- Useful contact numbers: Ask your team for the best numbers to call should you have any concerns. You can write them down below:

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Useful websites/ resources:

- Mouth Cancer Foundation
- Cancer Net UK
- MacMillan
- National Institute of Dental and Craniofacial Research Patient Leaflets
- Oral Cancer Foundation

This booklet is a general guide. This does not replace any specific guidance given by your team. Please ask your team, especially if you are struggling.

NOTES

Use this space as you wish to note any questions you may have/write down any advice given to you

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References:

- Cancer Net UK
- MacMillan
- National Institute of Dental and Craniofacial Research
- Predicting and Managing Oral and Dental Complications of Surgical and Non-Surgical Treatment for Head and Neck Cancer Clinical guidelines
- Mouth cancer foundation
- Oral cancer foundation
- The Oral Management of Oncology Patients Requiring Radiotherapy, Chemotherapy and / or Bone Marrow Transplantation Clinical Guidelines RCS



www.mouthcancerfoundation.org