Dental care information for patients who will receive head and neck radiotherapy

Introduction

This leaflet describes the changes you may notice in your mouth when you start your radiotherapy treatment for your cancer. The symptoms you may have are also described and advice is given on how to best deal with them. You will also find advice on how to keep your mouth as healthy as possible during and after radiotherapy treatment.

When will I start noticing changes in my mouth?

Patients usually start to notice changes in their mouth about 2 weeks after starting radiotherapy treatment. Your mouth may feel sore and become dry. You may also develop mouth ulcers and loss of taste.

These changes can make it difficult to swallow and eat. If you have dentures you may struggle to wear them during this time. It may also be difficult to brush your teeth as the muscles that move your jaw can feel very stiff.

You will be seen by 2 consultants in the Dental Assessment Clinic who will advise you on treatment to make sure your mouth is as healthy as possible. A healthy mouth may help to reduce any side effects from the radiotherapy treatment.

Loss of taste

This happens as the taste buds are damaged by radiotherapy but can begin to improve after your radiotherapy treatment has finished. To help reduce this problem we recommend that you:

- clean your teeth and tongue before mealtime
- use a salt water mouthwash before eating (10mls of warm water with a small teaspoon of salt)
Jaw stiffness
This is a common side effect due to the direction of the radiotherapy through the muscles that move your jaw. You can help relieve this by:

- gently stretching your mouth open on a regular basis throughout the day

Dry mouth
Saliva is important to keep your mouth moist. It also protects against tooth decay and sensitivity. The glands that produce saliva are very sensitive and will be damaged by the radiotherapy. After radiotherapy your dry mouth will improve, however most people are left with some permanent dryness in their mouth. This can be helped by:

- sipping water often
- avoiding fizzy or flavoured water, even diet rinks as these can damage your teeth
- chewing sugar-free gum to encourage saliva production
- using high fluoride toothpaste. This will be prescribed for you at the dental clinic when you have your initial assessment

Your head and neck team may recommend and prescribe a saliva substitute which some patients find helpful. You may also be referred to a Xerostomia Clinic. This clinic is held once a month at one of our hospitals and aims to help patients with a dry mouth.

Sore mouth
Radiotherapy damages the top layer of cells covering your mouth and gums. These areas may become red, sore and develop ulcers. Some patients develop oral thrush which can make your mouth more sore. To help with this:

- drink lots of cold drinks as these can soothe your mouth
- avoid spicy and citrus foods
- use a baby soft toothbrush to clean your teeth with high fluoride toothpaste
- try to rinse your mouth with a salt mouth wash 4 to 6 times a day, however, sometimes this can be too painful
• Avoid chlorhexidine (Corsodylâ) mouthwash and any mouthwash that contains alcohol

You may find a numbing mouthwash or spray helpful so please ask a member of the team caring for you about these. The team will also prescribe medication to treat any thrush or fungal infection.

**Difficulty with dentures**

The reduction in saliva and a sore mouth can make it hard to wear your dentures. You should:

- visit your dentist as they may be able to remove any sharp edges
- clean your dentures after each meal with a toothbrush and toothpaste
- always take your dentures out at night and soak in a cleanser such as Steradent®

**How long will these side effects in my mouth last?**

Some of the side effects like soreness, mouth ulcers and loss of taste will improve slowly in the weeks and months after you have finished treatment. A dry mouth however will most likely be a long term problem.

Long term management of a dry mouth is usually with the use of mouthwashes/ gels or medication. Speak to your head and neck nurses or your dental consultant if you would like any further advice.

**What are the main risks in my mouth after radiotherapy?**

- Tooth decay
- Osteoradionecrosis

Osteoradionecrosis is a condition where the jawbone dies in places. It is caused because radiotherapy changes the bone and means it is less able to heal itself. This condition is painful and hard to treat.
It is important to follow the advice given at your dental assessment appointment. You will have agreed a treatment plan with the dental consultant. You will also be prescribed high fluoride toothpaste and some other products that you may find helpful during your radiotherapy treatment.

**Contact information**

If you have any mouth or tooth related problems please do not hesitate to contact one of the following:

**Oral and Maxillofacial Surgery Department**  
Tel: 0300 422 8175  
Monday to Friday, 9:00am to 5:00pm

**Head and Neck Macmillan Clinical Nurse Specialist**  
Tel: 0300 422 6785  
Monday to Friday, 9:00am to 4:00pm

**Further information**

**Mouth Cancer Foundation**  
Website: [www.mouthcancerfoundation.org](http://www.mouthcancerfoundation.org)

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