

Radiation Treatment Information for Patients with Head and Neck Cancers

This information will help prepare you and your caregiver for your treatment.

CT Simulation

Prior to starting radiation, you will have a CT treatment planning scan, a CT simulation, which will be used to plan your custom radiation therapy plan. During the CT simulation appointment specially trained radiation therapists will place you in the correct treatment position and then make a custom mask that you will wear every day for your radiation treatments.

A very warm and wet plastic sheet of open mesh will be placed over your face and neck. You will be able to see and breathe while the mesh is over your face. Once the mask is made, it will be stored in the clinic and you will use it every day for your radiation treatments. If you are concerned about being claustrophobic, please let a nurse know before the CT simulation appointment.



Figure 1a. CT simulation machine; Figure 1b. Custom-made mask

After the mask is made, we will perform a CT scan just like the scans you've previously received. The table is flat and may feel firm; in this case we can place a pad underneath. If your doctor prefers contrast dye, this can be given by IV. If you have a contrast allergy, we can give pre-medications to avoid an allergic reaction. We will ask you to hold still while the CT scan images are being taken. After this is completed, you will be given an appointment card with the date and time of your first treatment. Subsequent treatment times will be set with the therapists after your first radiation appointment. Sometimes you may also get an MRI scan to assist with planning your radiation treatment.

You may also have a custom "**bite block**" made during this visit. This is a wax block that is heated and then placed in your mouth to mold around your teeth. The bite block helps move your normal tissues (like the tongue) away from the radiation. It is like an ice cream bar you keep in your mouth during treatment. You will be able to breathe and swallow, if necessary, when it is in your mouth. This device will also be kept in the department for the duration of your treatment.



Figure 2. Bite block

In some cases, often after surgery, we might place a material on your skin called a "**bolus**" that is normally used around surgical scars to help deliver radiation to the skin. The "**bolus**" material is a soft jelly-like substance. This material will be placed on your skin during the CT simulation just as it will be used during each treatment. Sometimes we will also place thin wires on the skin to help us mark the location of scars on the CT simulation scan.



Figure 3. Bolus

Possible Referrals Prior to Treatment

You may be referred to see several specialists before or during your treatment. Some of the referrals can include:

- A dentist to check your teeth and perform any necessary work before radiation treatment begins. We may require a dental clearance from your dentist prior to the start of treatment.
- A speech language therapist to assess, diagnose, and treat any swallowing dysfunction you may have prior to starting radiation or that develops during radiation treatment.
- A dietitian to discuss nutritional needs, including recommended foods and liquids high in nutrition that are easy to swallow.

Possible Radiation Side Effects (dependent on the area treated)

- Fatigue (most common side effect)
- Mouth changes that can include mouth and throat pain, difficulty or painful swallowing, dry mouth, thick phlegm, and taste alterations
- Skin changes that can resemble a bad sunburn or increased pigmentation
- Changes inside your nose, including dryness, stuffiness, and occasional minor nosebleeds (if treating your sinuses)
- Ear pain from swelling

Usually, patients do not experience side effects during the first full week of treatment other than possible fatigue. These other effects may gradually start to occur over the next several weeks. A clinical visit is completed once a week following your radiation treatment. In this appointment, we can discuss methods to help with your side effects. You can always ask to speak to your nurse at any point during the treatment course if you have any questions.

Vitamin Usage During Treatment

If you are taking any vitamin supplements, please consult the medical team as several are not recommended while on therapy.

Contact Us

Call the clinic at 214-645-8525, or for non-emergent issues, please utilize MyChart allowing at least 24 hours on business days for a response. If it is emergent afterhours, you can speak to an on-call team. In the case of emergencies, please proceed to your nearest Emergency Room. If possible, please come to UT Southwestern or Parkland Emergency Department for continuity of care should you need to be admitted to the hospital.