RADIATION THERAPY TO THE MOUTH AND THROAT  
(Pre-treatment patient education sheet)

Radiation is used to treat cancers of the mouth, throat, tongue, salivary glands, thyroid and other tissues in the area. The treatment is not to the full body. It is aimed at the area of the mouth and throat where the cancer is located. In patients who have had surgery, radiation is often given to decrease the risk of cancer returning to the area.

Before Treatment

First appointment: You will meet with your radiation oncologist, who will explain the benefits and risks of radiation treatments. You will also meet with your patient designated nurse (PDN), who will provide you with the information needed to contact your treatment team.

Treatment planning appointment: It is likely that you will have a dental appointment before the start of your treatments. If a dental appointment is needed, you will be sent to a dentist who specializes in cancer patients here at the hospital. Radiation treatments to the mouth can affect your teeth and jaw. The dentist will discuss the dental care needed before you start your treatment. Custom fluoride trays may also be constructed.

Third appointment: You will have a planning CT scan (computed tomography scan). You may be asked to have an intravenous line placed temporarily in your arm/hand so that dye (contrast) can be given during the scan. This will help improve the quality of the scan. The planning CT scan appointment will last between 30 to 40 minutes. During this appointment, you will be fitted with a custom immobilization mask. This mask will be used to keep you still for the scan and treatment. The CT scan is painless and only takes a couple of minutes to complete. Most of the appointment time is used to explain the procedure and making sure you are well positioned for the scan.

While preparing you for your scan, the radiation therapist will need to touch you in order to adjust your body position. In addition, the area to be treated will need to be visible to the therapist.

Magnetic Resonance Imaging appointment (MRI): You may also need a MRI scan before you start your treatments. This scan will help in the planning of your treatment.

Once your planning CT scan is done, it usually takes 1 to 2 weeks to prepare your radiation therapy treatment plan. These planning processes, along with many quality and safety checks, are needed to make sure you receive the best treatment available.

Treatment
Once your treatment plan is ready you will start your treatments. On your first day a radiation therapist or nurse will meet with you. He or she will review possible side effects and answer any questions you may have about the treatment. Plan to be at the Cancer Centre for up to 1 hour every day; sometimes delays occur.

Radiation treatments:
- Treatments are given five days a week (Monday to Friday) over a period of 4 to 7 weeks
- They usually take a few minutes, but you will be in the treatment room for about 20 minutes each day. Most of the appointment time is used to make sure the radiation is given to the exact area where the treatment is needed.
You will have an appointment with your radiation oncologist on a regular basis during your radiation treatments. Each radiation oncologist has a set day and time when they meet their patients in a “drop-in” clinic format.

**Side effects from radiation treatment**
There are two types of side effects: early side effects and late side effects. **Early side effects** happen sometime during your radiation treatment. They typically start to get better two weeks after your last treatment but they can continue for a few weeks or months after the last treatment. **Late side effects** usually happen a few months after your last treatment; sometimes they develop years after the treatment. The side effects that you may experience will depend mainly on the dose given. But you should be aware that even patients who receive the same dose of radiation to the same area of the body may have different side effects.

**Possible early side effects of radiation therapy to the mouth and throat:**
- fatigue
- skin reaction much like a sunburn
- dry mouth
- mouth sores
- taste changes
- sore throat and difficulty swallowing
- loss of appetite
- facial hair loss
- voice hoarseness

Most side effects are mild but they can continue for a few weeks or months after the last treatment.

**Possible late side effects of radiation therapy to the mouth and throat:**
- darkening and/or thickening of the skin covering the treated area
- higher chance of developing dental cavities
- severe damage to the jaw bone
- dry mouth
- sore throat and difficulty swallowing
- development of a new cancer in the treated area many years after treatment (rare)

Your Radiation Oncologist will explain these side effects and the risks for your particular situation.

**For more information please ask a member of your radiation treatment team.**