

# Radiation Therapy Head & Neck

## About the Radiation Oncology Team:

Radiation oncologists are the doctors who oversee the care of people undergoing radiation treatment. Other members involved in the radiation oncology team include therapists, radiation oncology nurses, medical physicists, dosimetrists, social workers, dietitians and communication clerks.

## Understanding Radiation Therapy:

Radiation therapy is used to kill tumours, control tumour growth or to relieve symptoms. Radiation works within tumour cells by damaging their ability to multiply. When these cells die, the body naturally eliminates them. Healthy cells in the treated area will be affected by the radiation, but, unlike cancerous cells, they are able to heal themselves.

## Medical Imaging:

During a course of radiation, medical imaging (similar to x-ray or CT scans) will be used by your radiation oncology team to ensure you are in the correct position. These images may also be used for clinical development and/or to aid in the education of health care team members within Radiation Oncology. Your personal health information will be protected according to the Personal Health Information Act of Manitoba.

## Possible Side Effects:

Radiation affects each individual differently. Radiation only affects the area being treated. You will not likely experience all the symptoms / side effects listed in this section. (Additional information will be supplied to help you manage your specific symptoms / side effects). The side effects from radiation can include:

- **Fatigue:** is a daily lack of energy; a feeling of tiredness, weakness or exhaustion. It may come on suddenly and it does not result from activity or exertion. It usually starts during your second to third week of radiation treatments and progresses as the treatments continue. Fatigue will usually subside within eight to twelve weeks after your last day of treatment.
- **Skin Reaction:** Begins a week to two weeks after starting treatment. The skin will start to become pink, resembling a sunburn. As treatment continues, the severity of the skin reaction may progress.
  - The initial skin reaction may present as erythema; the skin will start to appear pink, resembling a sunburn, may become dry and itchy.
  - The skin may further progress to dry desquamation; the skin may become increasingly red, tender and dry. It may become scaly and begin to peel.
  - If dry desquamation has occurred, the skin may progress to moist desquamation. The skin becomes thin, blistered and begins to weep. The fluid may be clear or milky in color and / or have an odor. At this point, further management of dressing changes and prescription creams may be required.
- **Local Hair Loss:** Usually occurs within the treated area two to four weeks after treatment starts. Re-growth of the hair usually occurs three to six months after your last day of treatment. Hair may not grow back in some areas depending on the dose of radiation received. You may notice that the re-growth of hair is thinner or a different texture. Remember that this is a local side effect only - hair elsewhere on your body is not affected.

- **Mild to Moderate Swelling:** You may experience some tenderness or discomfort within the treated area.
- **Inflammation of the Mucous Membranes:** If you are having treatment near or to the nose, mouth or throat, the membrane which lines the area may become irritated and dry. You may also experience redness, pain, swelling, mouth sores (ulcers), burning feeling, trouble swallowing, sensitivity to heat and cold, as well as sensitivity to salty and spicy foods and beverages.
- **Hoarseness:** During treatment you may experience hoarseness or temporary loss of voice. If this reaction does happen, please try not to talk, keep to short answers, or try writing.
- **Difficulty Swallowing:** If the esophagus, the muscular tube that carries the food to the stomach, is in the treatment area you may develop painful swallowing or a feeling of food being “stuck” while eating or drinking. *More information can be found on the “Difficulty Swallowing” information sheet.*
- **Taste Changes:** Many people have taste changes during their treatment. It is different for each person. Try to eat foods that you like best, even if you eat the same foods for a while. Or, experiment with different foods. Keep a list of the foods that taste good to you.

**Tips to Help Manage Taste Changes:**

- Rinse your mouth before meals. Use one of the rinses listed in *Tips to Help Manage Mouth Dryness*. Rinse often between meals as well.
- Brush your teeth and tongue often using a **soft** toothbrush and recommended toothpaste.
- Add a pinch of salt to food if you find it too sweet. Add a pinch of sugar to food if you find it too salty.
- Marinate meat, chicken and fish to help mask the bitter taste. Try marinades made from orange juice, lemonade, vinegar, soy sauce, lemon juice, Italian dressing, sweet and sour sauce, and teriyaki sauce.
- Use plastic utensils to lessen the metallic taste.
- **Dry Mouth:** Radiation therapy to the head and neck area can reduce the amount of saliva and may also increase the thickness. Many drugs such as those used to control pain and nausea may also add to mouth dryness temporarily. Dehydration may also cause dry mouth. It is important to sip small amounts of water throughout the day.

**Tips to Help Manage Mouth Dryness:**

- Rinse your mouth often with one of the following rinses. This will help remove food particles and put a “fresh” taste in your mouth.

Rinse #1

1/2 tsp salt  
1 cup water

Rinse #2

1/2 tsp baking soda  
1 cup water

- Carry a small bottle of water (or either of the above mentioned rinses). Use to help moisten your mouth when talking.
- To stimulate saliva production, try sugarless gum or candy.
- Breathe through your nose, not through your mouth.
- Use a humidifier at night in your bedroom to help moisten the air.
- Keep a glass of water by your bed.

Side effects are different for each patient depending on the area that is being treated. It is important to tell a health care professional (radiation oncologist, nurse or radiation therapist) of any changes.

Most of these side effects will begin to heal within two to four weeks after your radiation treatments are complete and it may take up to six to eight weeks for them to go away.

Late side effects may begin six months after radiation therapy is over. Late side effects will vary depending on the area that was treated and the radiation dose received.

Everyone reacts to radiation differently and every patient's healing process is not the same. If you have any questions or concerns regarding the late side effects, please ask your radiation oncologist.

**Caring For Yourself During Treatment:** It is important to take care of yourself while you are having treatment. Here are some general helpful hints that will help you cope with the side effects of treatment.

- Rest when required and eat a well balanced diet. This will increase your energy level and help repair healthy tissue. If you are losing weight, eating foods that are high in protein and calories may help to maintain your weight. If you are experiencing ongoing weight loss, ask to see a dietitian.
- Drink 8-10 (237 mL / 8 oz.) glasses of fluids per day.
- Begin recommended skin care on the first day of radiation treatments and continue until the skin reaction has healed. Skin reactions in the treatment area may continue to develop for approximately two weeks after your last treatment.

**Skin Care:** (Applies to all patients)

- Report any rash or break in the skin to your therapist or nurse. Prevent infection with good hand washing and skin care.
- Use a *\*gentle soap* (e.g. Dove).
- When bathing, use a clean washcloth and do not scrub treatment area. Pat skin to dry, using a soft towel.
- Use *\*unscented lotions* (e.g. Glaxal Base or Lubriderm cream) on the area of treatment two to three times per day. (If the skin breaks open, refrain from using skin products and report to a radiation therapist, nurse or radiation oncologist as soon as possible).
- Wear loose cotton clothing over the treatment area.
- During treatment protect area from sun and wind. Do not expose treatment area to sun during treatment and after treatment until reactions have subsided and then use a high factor sunblock.
- Sunbathing and use of tanning booths are NEVER recommended for any person at any time.
- Do not use any sunscreen, scented soaps, powders or cosmetics, icepacks, heating pads or hot water bottles in the treatment area until radiation treatment course is entirely completed, and all skin reactions have healed.
- Do not scratch. Avoid any friction in the affected area.
- Avoid smoking - smoking interferes with the healing and increases itching.
- Avoid alcohol as this causes mouth dryness.
- Avoid hot tubs, saunas and tanning booths.

**Mouth Care:** (Only applies if mouth being treated). *\*\*Please advise a member of your radiation team if you will be having any dental work done within the time frame of your treatments as this can affect your treatment.\*\**

- During treatment rinse your mouth often. Use warm water or soda water to reduce the chance of infection. Mix 1/2 tsp salt in 1 cup water (preferred mouth rinse) or 1/2 tsp baking soda in 1 cup water or a combination.
- Brush your teeth with a *\*soft toothbrush*. You may find it helpful to soften the toothbrush in warm water prior to using. Use a mild-tasting toothpaste that does not contain peroxide, tartar control or fluoride. We recommend Biotene®.
- Patients receiving treatment to the mouth may develop a fungal (yeast) infection in the area. Check your mouth daily for sores or signs of infection. If you have a white coating on your tongue, gums or the roof of your mouth that is not easily removed by brushing, tell your radiation oncologist, nurse or therapist.
- Use *\*mouthwashes* recommended by your radiation oncologist (e.g. Biotene®, baking soda/water or salt water. Avoid mouthwashes containing alcohol.
- Wear dentures only for eating.
- *\*Lanolin-based non-perfumed lip care creams* are advised.

- Drink *\*supplements* (e.g. Boost®, Ensure®) with a straw. Rinse your mouth after drinking.
- Notify your doctor or nurse if you develop difficulty opening your mouth.
- Tell your dentist that you will be receiving treatment to the head and neck area. Tell the dentist the dates, treatment type and name of your radiation oncologist.
- Arrange to see your dentist 3-4 weeks after the completion of treatment as you may have some new tooth decay that can be treated.
- If you wear dentures, they may not fit well after treatment. You may need new dentures.

*\*We recommend that you have these items at home for use for the duration of your radiation treatments.*

### **Support:**

At CCMB we have many different support systems available to you. If you have not received a “Patient & Family Information Guide”, please let your radiation therapist know. This booklet outlines many of the support systems to help you during this period in your life (listed below). If you have interest in any of these services or want a referral, please ask your health care professional or contact the phone numbers provided.

- Dietitian
- Guardian Angel Room
- Patient & Family Resource Centre
- Lennox Bell Lodge (for out of town patients), phone: 204-787-4271
- Volunteer Driver Program (for city residents), phone: 1-800-263-6750
- Patient Representative
- Sexuality Counselor
- Psychosocial Services
- Spiritual Health Specialist

### **Medical Contact Information:**

Medical issues during treatment hours: Contact 204-787-2252 or 204-787-2180

Urgent medical issues after hours or weekends: Contact the radiation oncologist on-call: 204-787-2071

Emergencies: Go directly to your closest Emergency Department, or dial 911.