

# Radiation Therapy

## Primary Brain Tumours

**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 radiation 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 person differently. Radiation only affects the area being treated. 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.
- **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.
- **Skin Reaction:** Begins two to four weeks after starting treatment. The skin will start to become pink, resembling a sunburn. As treatment continues, the severity of the skin reaction will 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.
- **Swelling:** Swelling in the brain can cause headaches, nausea, weakness in an arm or leg, speech problems or unsteadiness on your feet. It is important to tell a health care professional if you are experiencing any of these side effects as you may require a prescription medication or a change in the dosage of medications you are taking.
- **Other Possible Side Effects:**
  - Muffled hearing / irritation within and / or around the ear.
  - Double vision.
  - Tearing or redness in the eye.

Side effects are different for each patient depending on the area of the brain 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 later 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 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 (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:**

- 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).
  - 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).
  - When bathing, use a clean washcloth and do not scrub treatment area. Pat skin to dry, using a soft towel.
  - Use a *\*scent free* gentle shampoo when washing hair / scalp (e.g. baby shampoo).
  - Use hair dryer on a cool setting or air dry.
  - Do not use hairspray, mousse, gel and / or any other styling products.
  - Do not color or perm hair.
  - You may decide to cut your hair short or shave your head, if so, use an electric razor.
  - During treatment protect area from sun and wind (e.g., *\*umbrella, \*hat or \*toque*). 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, 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 hot tubs, saunas.
- *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.