

Radiation Therapy for Skin Cancer: High Dose-Rate (HDR) Brachytherapy Treatment

You are having HDR brachytherapy to treat your skin cancer. This handout offers information on HDR brachytherapy treatment. For more information on radiation treatment, see the Canadian Cancer Society's booklet on Radiation Treatment: A Guide for People with Cancer. Go to the Canadian Cancer Society's website at cancer.ca and search for the name of the booklet.

The number of skin brachytherapy treatments you have depends on what your radiation oncologist ordered for you. These treatment appointments will be booked over several weeks.

After each radiation treatment, it is safe for you to be around other people (including children) and pets. You are not radioactive.

We support you and your family member/partner-in-care during your treatments. Let us know if you have any questions about your care or treatments.

About your HDR brachytherapy treatments

Your treatment appointments are 15 to 30 minutes long. Check in at a computer on the B1 level (lower level) of the cancer centre when you arrive at the cancer centre. A radiation therapist calls you from the waiting room and takes you to a treatment room. They explain how the treatment is completed.

For this treatment, a radioactive source is put inside the applicator that is placed on your skin. The applicator stays in place for 5 to 10 minutes. During treatment, you lay on a stretcher with the applicator placed on your skin. You need to be in a comfortable position, as you cannot move during the treatment.

A circle applicator (see picture #1) is put on your skin.



Picture #1: Circle Applicator

The applicator is connected to the brachytherapy treatment machine (see picture #2) with one or more tubes. A radioactive source moves through the tube(s) into the applicator. At the end of each of your treatments, the radioactive source returns to the machine and the applicator is removed from your skin. You can go home after your treatment is finished.



Picture #2: brachytherapy treatment machine.

Side effects you may have

Radiation treatment side effects are different for each person. Side effects depend on:

- The part of your body treated,
- The type and amount of radiation you have and,
- Your general health.

The following information is about the side effects you may have.

No energy/feeling tired

Radiation therapy to your skin may cause you to feel tired. You may find your energy level is low.

What you can do to help:

- Keep your normal sleeping schedule. Wake up at the same time each day.
- A short nap (less than an hour) between 12 pm and 3 pm may give you more energy.
- Reduce your alcohol and caffeine in the afternoon and evening.
- Plan your day with time to rest before and after activities.
- Eat healthy foods. Eat small meals and snacks throughout the day.
- Drink 6 to 8 cups (1 cup = 250 ml) of fluid every day. This helps you stay hydrated.
- Keep active with about 30 minutes of exercise (example: walking) each day. If 30 minutes of exercise is too hard for you, split it up into shorter sessions of exercise (about 5 to 10 minutes).

For more information, read the “How to Manage Your Fatigue” booklet found at cancercareontario.ca/en/symptom-management/3991

Skin symptoms

Radiation therapy to your skin may cause you to have dry, itchy or reddening of the skin in the treatment area. These symptoms are common in areas where there is friction or skin folds. You may have loss of hair in the treatment area.

Caring for your skin in the treatment area

You can:

- Wash your skin gently. Use an unscented soap and lukewarm water. Pat dry.
- Use lanolin free unscented lotions or creams to moisturize your skin.
- Wear soft, loose fitting clothing over your skin in the treatment area.
- Use an electric razor and not a disposable shaver to shave your skin in the treatment area.

Do not:

- Do not go swimming if you have sores or open areas on your skin in the treatment area.
- Do not use aftershave or perfume on your skin in the treatment area.
- Do not use baby powder or cornstarch on your skin in the treatment area.
- Do not use aloe vera on your skin in the treatment area.
- Do not use a heating pad or ice pack on your skin in the treatment area. Do not sit in a hot tub.
- Do not use adhesive tape or band-aids on your skin in the treatment area.
- Do not allow your skin surfaces to rub together or clothing to rub against your skin in the treatment area.
- Do not expose your skin in the treatment area to direct sun. Wear a wide brimmed hat and shirts that covers your skin in the treatment area. Stay in the shade if possible.
- Do not use sunscreen on your skin in the treatment area. After your treatment is finished and your skin has healed (no open areas) you may use sunscreen (SPF 30+).

It is important to let your healthcare team know if you have signs or symptoms of an infection (example: a fever, drainage, or odour) of a sore or wound on your skin in the treatment area.

Relationships, body image and intimacy symptoms

Radiation therapy can affect your relationships, body image and intimacy. It may change the way you feel about sex. It is also common to have fears and worries that may affect your relationships with others. This can cause changes in your stress level and emotions.

What you can do to help:

- Talk to any member of your healthcare team about your fears and worries.
- Talk to your family and friends about your fears and worries.
- Ask any member of your healthcare team about community programs that can help support you such as Hearth Place, Canadian Cancer Society, and the Look Good Feel Better Program.
- Keep a daily journal throughout your treatment.

For more information read the “Intimacy and Sex For People With Cancer and Their Partners” booklet found at cancercareontario.ca/sites/ccocancercare/files/IntimacyandSex.pdf

After your treatment is finished

Any side effects you have from your radiation treatment will continue for 4 to 6 weeks after you are finished. Some of the side effects may get worse before they get better. At your last treatment appointment, the radiation therapists will talk to you about how to care for your skin during this time.

You receive an appointment to see your radiation oncologist about 4 to 6 weeks after your last treatment. This appointment is given to you before your last treatment. It is important you have enough of the medications the radiation oncologist prescribed for you until you come back for this appointment.

If you have a problem or concern about a symptom or side effect from your cancer treatment:

1. Call your primary nurse at the cancer centre from Monday to Friday, 8:30 am to 4 pm, (except on holidays). Use the phone number your primary nurse gave you.
2. Contact CareChart Digital Health from Monday to Friday, 5 pm to 8:30 am and anytime on weekends and holidays for symptom management support.

Talk to a nurse using one of these options:

- Call the after-hours telephone line at 1-877-681-3057.
- Request a video call by going to carechart.ca.
- Use the CareChart Digital Health App. This App is available to download for iOS or Android devices.

Call 911 or go to the Emergency Department at the hospital closest to you for a medical emergency. Talk to a member of your healthcare team if you have questions or do not understand any information in this handout.

Last reviewed: March 2025