Stereotactic Body Radiation Therapy (SBRT) to your lung

SBRT is a type of high dose radiation used to treat small tumours. This handout gives you the information you need to understand this treatment. It is important to read this handout to help you prepare for your appointments.

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

SBRT gives you a high dose of radiation during each treatment. It is important for your healthcare team to find the exact position of your tumour(s) before and during each treatment. You need to keep your body still during the treatment. This will make sure the treatment is given correctly.

**CT Simulation**

CT simulation is the first step in preparing you for SBRT treatment. At this appointment you will have a ‘planning’ CT scan. Your lungs move around when you breathe. This CT simulation allows your radiation oncologist to see your tumour(s) better as your lungs move with your breathing.

At this appointment your radiation team will decide what the best position is for you to have your treatments. This position helps reduce movement of your tumour when you breathe. You may have a custom “cushion” with an inflatable belt placed around your abdomen and comfortably tightened (see picture #1). Another option is to have a compression bridge over your abdomen (see picture #2).

![Picture #1. The picture shows what the inflatable belt looks like.](image-url)
Picture #2. This picture shows what the compression bridge looks like.
Let your radiation team know if you are unable to continue for any reason.
You will be given permanent tattoos (small markings) at this appointment. These tattoos will be used to position you for your radiation treatments.

**Treatment planning**
The next step is treatment planning where your team will find the best way to direct the radiation to your tumour(s) (See picture #3). You are not present for this treatment planning.

Picture #3. This picture is an example of how radiation beams are directed to your tumour(s) during SBRT treatment planning.
Radiation treatment

Each treatment will be about 1 hour.

If you normally have muscle or bone pain, it may help to take a pain medication (acetaminophen or ibuprofen) before your radiation treatment appointments. This will help you be comfortable during your treatments. Your radiation oncologist may give you a prescription for a medication (steroid) that helps reduce inflammation of your lungs caused by the radiation.

Radiation treatments do not hurt. You will be positioned using your tattoos. Once you are in the right position on the treatment bed, it is important you don't move. This will make sure the treatment is given correctly.

X-ray images will be taken to check the position of your tumour(s). Changes to your position will be made if needed. To make these changes, the treatment bed you are lying on may move a little.

Picture #4. This picture shows the type of radiation machine that is typically used to give your SBRT treatment.

You will be scheduled for follow up appointments with your radiation oncologist after your radiation treatments are finished.

Preparing for your radiation treatments

- Take the steroid medication if it was prescribed for you by your radiation oncologist.
- Keep taking your regular medications (unless your radiation oncologist tells you not to).
- It is okay to eat and drink before your treatment. Eat a light meal.
Side effects of your radiation treatments

At your CT Simulation appointment, you will be provided with the handout “Radiation Therapy to the Chest” which gives you information about the possible side effects of radiation therapy. You can find more information in the Canadian Cancer Society booklet “Radiation Therapy: A Guide for People with Cancer.”

Please talk to any member of your healthcare team if you have questions or do not understand any of the information in this handout.

If you have a problem or concern about a cancer related symptom

1. Call your primary nurse at the cancer centre from 8:30 am to 4 pm, Monday to Friday (except on holidays). Your primary nurse will have given you the number to call.

2. Call the After-hours Symptom Management Telephone Service at 1-877-681-3057.
   • From 5 pm to 8:30 am, Monday to Friday.
   • On weekends and holidays at any time of the day or night.

If you are having a medical emergency, call 911 or go to the emergency department at the hospital closest to you.

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