

Stereotactic Body Radiation Therapy (SBRT)

- Planning and treatment guide -

What is SBRT?

Radiotherapy is a common treatment for patients with cancer. It is usually given in small daily doses for up to 3 to 6 weeks.

Improvements in radiotherapy have allowed radiation oncologists to remove tumours as precisely as surgical methods with the use of a radiation beam. This is known as stereotactic body radiation therapy (SBRT). The benefits of SBRT are that patients can have more convenient, less invasive treatments with less side effects and possibly long term cancer control.

Each SBRT treatment typically lasts 15 to 60 minutes depending on the location and number of areas to be treated. A custom body mould is made during the planning visit to ensure that you are in the same position for each treatment.

Planning your treatment: Mould Room appointment

For this appointment you will need to change into a hospital gown. In the Mould Room a form fitting device will be made to help keep you still during your treatment. This device is your custom mould. This will also provide support to keep you comfortable.

Your appointment in the Mould Room takes about 30 minutes. Please let your radiation therapy team know if you are uncomfortable as you will be in this position for up to 30 minutes each day during treatment.



CT and MRI Simulation

The next step is a CT Simulation appointment. This will be on the same day as your mould room appointment. You may eat or drink normally prior to CT simulation, unless you are given special instructions by the staff prior to your appointment.

- Radiation therapists will perform this procedure and explain it to you.
- You will be placed in your custom fit mould and have a CT scan.
- In some cases this will include a compression device across your trunk. You will be asked to lie still and breathe normally.
- In some cases you may be required to have IV contrast with your CT Simulation in order to better see the tumour during radiation planning.



After the scan is done, you will need to have a few small tattoo dots placed on your skin. These are used by your treatment radiation therapists to position you in the same way each day. Photos of your set-up position will also be taken to help with your daily treatment set-up.

You may also require an MRI to help plan the radiation. Radiation therapists will perform this procedure as long as you agree to it, and have filled out a pre-scan questionnaire. You will have this scan in your custom mould. Depending on the area that is being treated, you may be asked to hold your breath for several seconds during the scan.

When will my radiation treatments start?

- After the treatment planning appointment, time is needed to design your treatment plan.
- Your planning team includes: radiation therapists, physicists, and your radiation oncologist, each of which ensures the highest standard of care for your safety.
- You will be called at home with the start date and time of your treatment.
- The JCC aims to give you at least 2 days' notice before your treatment starts, however, this is not always possible.
- If you will be using volunteer drivers please let a radiation therapist know during your CT simulation appointment.
- Please make sure that your contact information is current.

Where do I go for my appointments?

- Once at the JCC, take the main elevators to Level 0.
 - Check in at the reception desk. The receptionist will instruct you on how to get to the right area.
 - Radiation Therapy Department regular clinic hours: 8 a.m. to 6 p.m., Monday to Friday. We are closed on holidays.
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What happens if I cannot make an appointment or will be late?

- Call 905-387-9495 and ask for the Radiation Therapy Department.
- Let the clerk know your name and what appointment you are calling about.
- Please give 48 hours' notice if you need to change your appointment.

What if I have more questions?

If you have questions or concerns before or after the treatment planning appointment, call your radiation oncologist's office.

Side effects during treatment and shortly after

The side effects that you have will depend on:

- previous treatments you may have had
- your general health
- your current treatment plan

Your radiation treatment should feel like getting an x-ray. You should not experience pain or discomfort during your treatment.

Nausea (stomach upset)

If the area being treated is close to the stomach and digestive organs, you may feel nauseous, or have constipation or diarrhea. Your doctor may give you medication for nausea to take before your treatment.

Fatigue – more tired than usual

You may feel tired during the period of your treatment. The reason behind this feeling is not known but likely due to the stress and the time you have to spend on the machine. Tissue damage may free some protein factors into your blood that make you feel tired.

The tired feeling will gradually go away in a week or two. Rest when needed. Please let us know if you are feeling more tired than usual.

Your body needs energy for the healthy cells to repair themselves during and after treatment. Eating healthy foods and drinking fluids are important during and after treatment. Let your radiation team know if you are having difficulty eating.

Shortness of Breath (SOB) -more than usual

Occasionally patients may feel increased SOB with each treatment. If the area being radiated is close to the lungs, the radiation may irritate the lungs. Your team may send you for special lung function tests if you become more short of breath. Let your radiation team know if you experience increased SOB.

Pain flare

If your bones or spine are being treated, you may experience a flare up of pain within 24 to 48 hours. It will resolve on its own, however you may speak to your doctor for more information.

Other side effects

There may be other minor organ (body parts) damage and rare side effects related to your radiation plan. Your radiation team will discuss this possibility with you.

Medications

Your doctor may prescribe a medication for you to take over the course of treatment or in preparation for treatment. If you have any questions about the medications, let your therapy team know.

Treatment appointment(s)

- Please arrive for treatment at least 15 minutes before your appointment. Your appointment may last about 15 to 60 minutes. Some of that time is used for answering questions, as well as setting up and taking images to check your position.
 - You may eat or drink normally prior to and after your treatments.
 - Treatment with SBRT uses high energy x-rays and is delivered by a machine called a LINAC. LINAC stands for Linear Accelerator.
 - Your radiation therapists will position you the same way as you were during your planning appointment with your custom mould. They will need to line up your tattoos into the correct position. As you are being set-up and during treatment you will be asked to lie still and breathe normally.
 - Each day before your treatment, a mini CT scan will be taken to confirm your correct positioning and to ensure the right area is being treated. This may take about 5 minutes, and after you may feel your treatment table move slightly. This moves you into the final set-up position.
 - The treatment is then delivered, which may take another few minutes. You can be seen and heard by your radiation therapy team at all times on a TV screen and intercom. During your treatment the LINAC will move around you slowly, and make a humming noise. You will not feel anything during the treatment. If you need assistance, call out and your therapists can stop treatment and help you right away.
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