Information for Men Receiving Radiation and Hormone Treatments for Prostate Cancer

Treatment Plan

Stage of prostate cancer: ________________________________________________________________

Radiation Treatments:
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________

Date for planning CT: _____________________________________________________________

Date to start radiation treatment: ________________________________

Hormone Injections:

____________________________________ every _____ months, for ______ months/years

Date of first hormone injection: _________________________________________________________

Hormone Pills (start one week before first injection):

__________________________________________ given once a day, for____ weeks/months

DRUG
Radiation Therapy for the Prostate

You have been diagnosed with cancer of the prostate and it will be treated with radiation therapy. The prostate is a small gland that sits in the pelvis, just below the bladder and in front of the rectum.

Radiation therapy is often used to treat prostate cancer. Sometimes it is used as the only treatment and other times it is used with surgery or hormone therapy. This decision is usually based on where the cancer is located, how far it has spread in the body, the PSA level (a blood test for prostate cancer), and how the cancer cells look under a microscope (Gleason Score or Grade).

How long will the treatment take?

The actual treatment only lasts 3 to 5 minutes. Your visit will take 20 minutes because Radiation Therapists need time to place your body in the exact same position at each visit. This is so the radiation hits the tumour in the same spot at each visit.

Radiation treatments are usually given Monday to Friday, but not on holidays. A typical radiation therapy plan has a total of 35 treatments given over 7 to 8 weeks.
**Where will the treatments take place?**

Radiation treatments are done at the London Regional Cancer Program (LRCP). Register at Radiation Therapy Reception, which is on Level 1 (Atrium) of LRCP. Please arrive 15 minutes before your treatment to register.

**How are my treatments planned?**

About 2 to 3 weeks before your treatments start, a planning session with a CT scan (planning CT) is done at LRCP.

Once the scan is taken, planning specialists work with your Radiation Oncologist to make a treatment plan that will meet your needs. Part of the planning process is to keep the effects of radiation as low as possible. They will pay special attention to the amount of radiation going to normal tissues, especially the bladder, rectum, and bowel.

At LRCP, you will get a treatment using a radiation therapy machine that changes the beam’s shape and strength. This allows doctors to increase radiation to the prostate while reducing radiation to normal tissue. It is called “Intensity Modulated Radiotherapy” or IMRT. This is done with “Image Guided Radiotherapy” (IGRT). IGRT uses imaging tools to see exactly where the prostate gland is located. This is done each day before treatment.

![Diagram](image.png)

This is an example of intensity modulated treatment to the prostate using an arc. Treatment is given continuously and precisely to the prostate as the machine rotates around you. Only a small amount of radiation is given to the bladder (in front), rectum (behind) and the hips (to the sides).
Preparing for the Planning and Treatment Sessions

The prostate sits just below the bladder. Located right behind the bladder is the rectum and bowel. The bladder, rectum and bowel can affect the position of the prostate. This is why it is important to try to have the same “fullness” for both the planning CT and the daily radiation treatments.

Why do I need a full bladder?

A full bladder helps to push your bowel and parts of the bladder out of the treatment area. This may help to reduce some of the side effects from the radiation therapy. A full bladder will also help with IGRT methods. It is important that your bladder is not so full that you are uncomfortable during the treatment.

How do I prepare my bowel and bladder for planning and treatment sessions?

You will be given special instructions to follow before arriving to your CT planning appointment and treatment sessions. A member of your health care team will provide you with a copy of these instructions on how to prepare your bowel and bladder and talk about these instructions with you. It is important that you follow these instructions to the best of your ability.

Side Effects of Radiation Therapy

Side effects can happen and they can be mild or severe. If you are bothered by a side effect, it is important to tell a member of your health care team. During your treatments, you will have regular visits with your Radiation Therapist and Radiation Oncologist. Your therapist and doctor can treat or tell you how to lessen these side effects.

Common short-term effects that usually lessen 2 to 4 weeks after treatments are finished:

- Bladder irritation that may lead to increased frequency, urgency or discomfort with urination.
- Bowel irritation that may lead to increased bowel movements.
- Fatigue.
Common long-term effects that may happen after treatments are finished:

- Change in bowel habit like needing to go to the bathroom more often.
- Difficulty having or keeping an erection.
- Small amount of rectal bleeding that does not happen often.

Uncommon long-term effects that happen to less than 1 in 100 men:

- Severe rectal bleeding (large amounts or frequent).
- Bleeding from the bladder.

Rare but serious long-term effects that happen to less than 1 in 1000 men:

- Severe injury to the bladder or rectum causing a fistula or an abnormal connection between these organs.
- Stricture (obstruction or blockage).
- Perforation (hole) in the bladder or rectum.

Follow-up

Once radiation treatments are finished, you will have checkups every six months for the first 3 years. These visits will be directed by your Urologist, Radiation Oncologist and family doctor. About 2 to 3 weeks before your visit, you will need to get a blood test to measure your PSA level.

At your checkup, the prostate will be examined and your PSA level will be discussed. PSA levels usually reach their lowest point about 18 to 24 months after radiation treatments are given. If both hormone and radiation therapies are given, the levels will go down sooner.

A low (less than 1.0) and stable PSA that is not rising tells your doctor that the cancer is likely controlled. Single rises in PSA levels may happen due to non-cancer causes like infection. PSA levels that continue to rise over a 6 to 12 month period may be a sign that the cancer is returning. If this happens, you may need more tests or treatment.
If PSA levels remain low and stable over three years, your checkups will change from every six months to once a year.

**Hormone Therapy for Prostate Cancer**

Testosterone is a male hormone that can make the prostate and cancer grow. The goal of hormone therapy is to stop the body from making testosterone. Hormone therapy can be used over the short term (3 to 6 months) before radiation therapy or the long term (years) after radiation therapy. In some men, hormone therapy may be given as the only treatment.

There are many different ways to give hormone therapy:

- Pills are taken on a daily basis.
- Injections are used for long acting treatments that can last for up to 4 months.
- Surgery to remove the testicles can be used as an option for men who need hormone therapy for the rest of their lives.

It is not unusual to have both injections and pills. Your doctor will tell you if hormone therapy is needed, how long it is needed and how it will be given. If you have any questions about the medicine used in hormone therapy, please talk to a member of your health care team.

**Side Effects of Hormone Therapy**

Men who are on hormone therapy may show some common side effects:

- Hot flashes or sweats;
- Weight gain;
- Fatigue;
- Decreased sex drive;
- Problems with erections;
- Breast or nipple tenderness;
- Mood changes.

Over the long term, some men may experience these side effects:

- Loss of muscle strength;
- Osteoporosis (bones that are less dense);
- Low hemoglobin (red blood cells), which is also called anemia.
Men who are on hormone therapy for more than 6 months will need regular visits with their family doctor to check their bone health (e.g., bone density studies). Sometimes hormone therapy is stopped if the side effects are severe or if the medicine makes the patient very ill.

**Patient Education Resources**

**Managing side effects**

The LRCP website has information on how to manage different side effects including anemia, fatigue and hot flashes. Go to the following link and look for “Managing Side Effects”.

www.lhsc.on.ca/Patients_Families_Visitors/LRCP

If you do not have a computer, ask a member of your health care team for a printed copy of the pamphlet you want to read.

**Internet Resources**

**Canada’s Food Guide**

**Canadian Cancer Society**
www.cancer.ca

**Cancer Care Ontario**
www.cancercare.on.ca

**National Comprehensive Cancer Network**
www.nccn.org

**Prostate Cancer Research Foundation**
www.prostatecancer.ca

**Prostate Cancer Centre - London**
http://www.lhsc.on.ca/About_Us/Prostate_Cancer_Centre
Diet

Did you know a ‘heart healthy’ diet with low levels of saturated fats and 5 to 7 servings of fruits and vegetables per day is a ‘prostate healthy’ diet as well? For more information see Canada’s Food Guide recommendations. To learn more about diet and nutrition, call Supportive Care at 519-685-8643 and ask to speak to a Dietitian. You do not need a referral.

Vitamins and Minerals

Men who are on hormone therapy should take vitamin D (1000 iu/day) and calcium (1200 to 1500 mg/day) to reduce the risk of osteoporosis. If you are on hormone therapy, talk to your doctor, nurse or dietitian about adding vitamins and minerals to your diet.

Exercise

Regular exercise can help improve mood and a sense of well-being. For men on hormone therapy, exercise helps to lessen the treatment effects on weight, muscle and bone. Your family doctor can help recommend an exercise program that is right for you.

Questions

If you have questions about your treatment, please call 519-685-8600 and choose option ‘3’. You may call during regular business hours, Monday to Friday between 8:30 a.m. and 4:00 p.m. The Telephone Triage Nurse (TTN) will give your message to your nurse. It may take up to 3 business days to return your call.

Please have your chart number ready when you call:
**Emergencies**

For emergencies and urgent matters, call the same number. The TTN will direct your care. If you are calling after hours, weekends or on holidays, call the same number but choose option '2' to reach the on-call oncologist. You may also call your family doctor. If you live outside of London, you may go to your nearest Emergency Department.