



Patient & Family Guide

2015

Hormone Therapy for Prostate Cancer



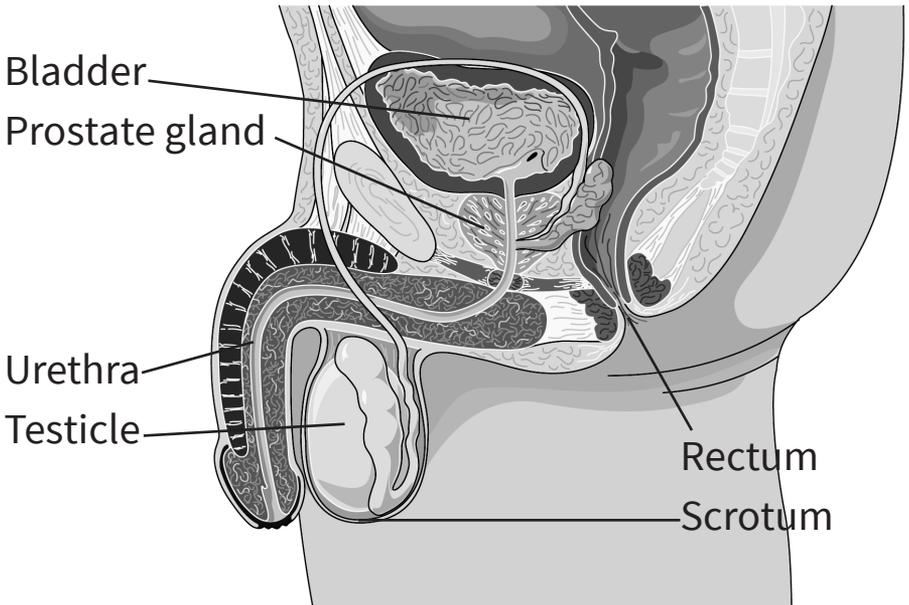
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Hormone Therapy for Prostate Cancer

What is the prostate?

The prostate is one of the male sex glands. It makes seminal fluid that is part of the semen that is released through the penis when a man ejaculates.

The prostate is about the size of a walnut. It lies just below the urinary bladder and in front of the rectum (the lower part of the bowel). The prostate gland also surrounds part of the tube that carries urine from the bladder through the penis to the outside of the body. This tube is called the urethra.



What is prostate cancer?

Prostate cancer is a disease where cancer cells start to grow in the prostate gland. These cancer cells grow into a tumour and can spread to other parts of the body such as the bones and lymph nodes.

What causes prostate cancer?

There is no single cause of prostate cancer, but some factors may increase the risk of developing it:

- Age, being older than 65
- Family history of prostate cancer
- African ancestry

It is possible to develop prostate cancer without having any of these risk factors.

What are hormones?

Hormones are chemical messengers made naturally in our bodies. Hormones control many of our body functions. Androgens are hormones that promote male characteristics such as facial hair, sexual function and muscle mass. Testosterone is the main androgen.

What does testosterone do?

Testosterone helps boys develop their adult sexual traits like body and facial hair, a deeper voice and sex drive. As an adult, testosterone keeps the prostate gland healthy. The testicles make most of the body's testosterone. However, to make testosterone, the testicles must first receive the "start" signal from special messenger hormones that come from the brain. Testosterone helps to keep bones strong. It also helps the production of red blood cells that carry oxygen in the blood.

How does hormone therapy work for prostate cancer?

The growth of prostate cancer cells depends on testosterone. Hormone therapy works by lowering the amount of testosterone in your body. When testosterone is taken away from the cancer cells, they will either die or slow down and stop growing. Hormone therapy alone is not a cure for prostate cancer.

Hormone therapy may be used:

- As the primary treatment for advanced prostate cancer.
- Before surgery to shrink the prostate
- After radiation to destroy cancer cells left behind and to lower the risk of cancer recurring (adjuvant therapy).
- Before, during and after radiation therapy.
- To relieve pain or control symptoms.

The type of hormone therapy used, and the doses and schedule of drugs vary from person to person.

How can my testosterone levels be lowered?

The amount of testosterone you make can be lowered by:

1. Removing your testicles by surgery (orchiectomy). This is called surgical castration.
2. Using medications to stop the testicles from making testosterone or blocking the action of testosterone (hormonal therapy). This is called chemical castration.

Hormone therapies to lower testosterone levels

The most common hormone therapies used to treat prostate cancer are:

1. LHRH Agonists

This therapy uses medication to **stop** the testicles from making testosterone.

Common examples of these drugs are:

- › Buserelin (Suprefact®)
- › Goserelin (Zoladex®)
- › Leuprolide (Lupron®, Eligard®)
- › Triptorelin (Trelstar®)

These medications are usually given every 1 to 6 months by an injection into skin or muscle.

2. LHRH Antagonists

This therapy uses medication to **stop** the testicles from making testosterone. An example is degarelix acetate (Firmagon®).

3. Anti-androgens

This therapy uses medication to **block** the action of testosterone.

Common examples of these drugs are:

- › Enzalutamide (Xtandi®)
- › Apalutamide (Erleada®)
- › Casodex®
- › Flutamide (Euflex®)
- › Nilutamide (Anandron®)

These medications are usually pills taken by mouth every day.

The cost of these medications varies but many can be quite expensive. For additional information on medication coverage, please refer to the handout *Medication Coverage: Frequently Asked Questions*.

What are the side effects of hormone therapy?

Side effects can happen with any type of treatment for prostate cancer but not everyone has them or experiences them in the same way. Side effects can happen at any time during hormone therapy. Some may happen during, immediately after, or a few days or weeks after hormonal therapy. Most side effects go away after hormonal therapy is over. Late side effects can occur after months or years on hormone therapy. Some side effects may last a long time or be permanent.

Fatigue

Fatigue (tiredness) is the most common side effect. Your nurse will give you information on fatigue and ways to help manage fatigue.

Hot flashes

Sudden sweating and a feeling of warmth is called a hot flash. The severity varies from

person to person. Hot flashes usually get better as the body gets used to the treatment. Medications are available to help control hot flashes.

Decrease in sexual desire

Decreased sexual desire affects almost all men taking hormone therapy. It will generally continue as long as the hormone therapy is taken but sometimes it may continue after stopping hormone therapy.

Erectile dysfunction (impotence)

Erectile dysfunction (ED) is also called impotence. ED is the inability to keep an erection sufficient for sexual intercourse. This is a very common side effect of hormonal therapy. There are several treatments available to help treat ED.

Weight gain

Weight gain and muscle loss are common side effects of hormonal therapy for prostate cancer. An increase in fat tissue causes weight gain and loss of muscle tissue causes a decrease in strength. A healthy diet and regular exercise help to reduce weight gain and muscle loss. Walking at least 30 minutes every day and doing light weight training 3 times per week is recommended.

Breast swelling or tenderness

Swelling of the breasts in men is called gynecomastia. It is a common side effect of hormonal therapy for prostate cancer.

Mood changes

It is **very normal** to feel a wide range of emotions. People tell us they often feel a mix of hope, anger, fear, feeling out of control, and depression. It is important to share what you are feeling with your healthcare team. We are here to answer your questions and to talk about any problems you may be having.

Other changes

Hormonal therapy results in loss of body hair as well as a decrease in the size of testicles. Hair on the head or facial hair is usually not affected.

Increased risk of diabetes

Hormone therapy may increase your risk of diabetes or make control of your blood sugar more difficult if you have diabetes. This is because the hormone therapy causes weight gain, and increased blood levels of lipids and glucose.

It is important for you to see your family doctor regularly for close monitoring of your weight, blood sugar, blood pressure and cholesterol levels.

If you smoke cigarettes, you should talk to your family doctor about smoking cessation programs.

Other side effects may occur. For more detailed information on specific drugs, please refer to the specific drug handout.

Resources

- Canadian Cancer Society: www.cancer.ca
- Prostate Cancer Canada: www.prostatecancer.ca
- Androgen Deprivation Therapy: An Essential Guide for Prostate Cancer Patients and Their Loved Ones. (2014) Richard J. Wasswesug, Lauren Walker, John Robinson.
- Men Cancer Sex. Anne Katz. (2010) Oncology Nursing Society.
- Intimacy with Impotence: The Couple's Guide to Better Sex After Prostate Disease. (2004) Ralph & Barbara Alterowitz.
- Sexuality for the Man with Cancer. (2013) American Cancer Society. Type title into the 'Search' bar at <http://www.cancer.org> and you can view or print the booklet.

If you have any questions, please ask.
We are here to help you.

Notes:

Looking for more health information?

Contact your local public library for books, videos, magazines, and other resources.
For more information go to <http://library.novascotia.ca>

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Nova Scotia Health Authority
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The information in this pamphlet is to be updated every 3 years or as needed.