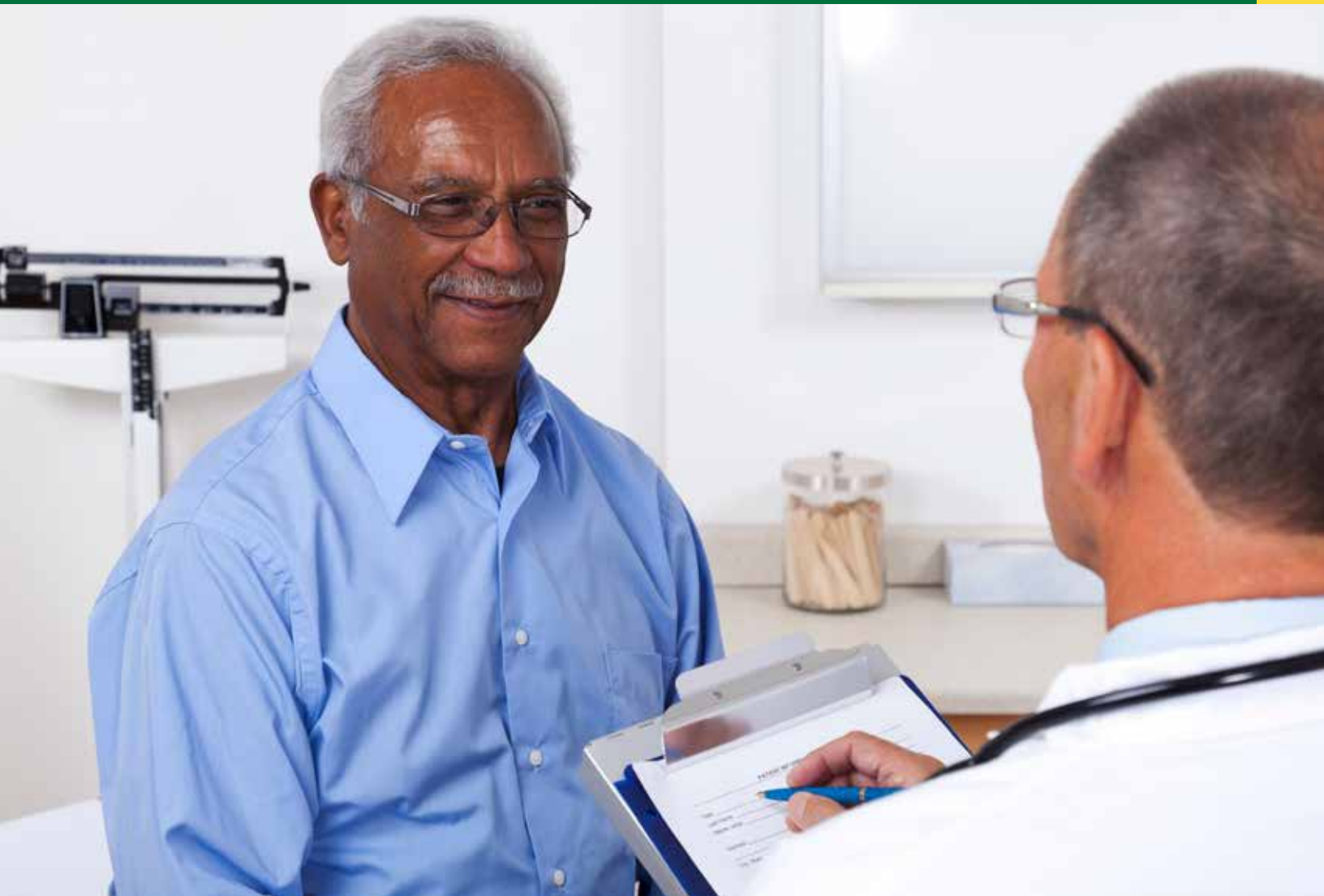


# Prostate Cancer

## Diagnosis and Treatment Information for Patients



Updated March 2019

### Saskatchewan Prostate Assessment Pathway

[saskatchewan.ca](http://saskatchewan.ca)



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## ■ Introduction

This booklet provides information about the diagnosis and treatment of prostate cancer. It can help you and your physician work together to make an informed treatment decision.

The Saskatchewan Prostate Assessment Pathway was developed to support men and their families in the diagnosis and treatment of prostate cancer.

The pathway includes a standardized patient care process, prostate assessment centres in both Regina and Saskatoon and ensures timely, evidence-based care. Primary care providers can refer patients directly to either centre, where nurse navigators will help support patients, provide information on tests and treatment options, and facilitate patients' journey from assessment to diagnosis and treatment.

## Patient and Coach Information

It is important that you choose a personal coach to be with you throughout your journey. A coach supports you prior to your treatment, during your hospital stay, and at home during your recovery. This person can be a family member, friend or caregiver. Please review this booklet with your coach before you make a treatment choice.

### What does a coach do?

- Attends an education session with you at the time of diagnosis
- Attends physician appointments with you
- Supports and works with you during your treatment
- Supports you after you have been discharged
- Translates, if English is not your first language

## Nurse Navigators

The nurse navigator will serve as a patient educator, advocate, care coordinator, system navigator and community ambassador. The nurse navigator works in collaboration with your physician, allied health care professionals and appropriate community

resources in a respectful, understanding and compassionate manner.

### The nurse navigator can provide:

- guidance through all phases of your journey
- accurate information to help you make informed decisions
- assistance to help get answers to your questions
- emotional support
- coordination of your care

## About Your Prostate

The prostate is one of the male sex glands. The other major sex glands in men are the testicles and the seminal vesicles. Together, these glands store and secrete the fluids that make up semen. The prostate, which is about the size of a walnut, lies just below the bladder and surrounds the upper part of the urethra.

The urethra is the tube that carries urine from the bladder and semen from the sex glands out through the penis. As one of the sex glands, the prostate is affected by male sex hormones. These hormones stimulate the activity of the prostate and the replacement of prostate cells as they wear out. The chief male hormone is testosterone, which is produced almost entirely by the testicles or testes.

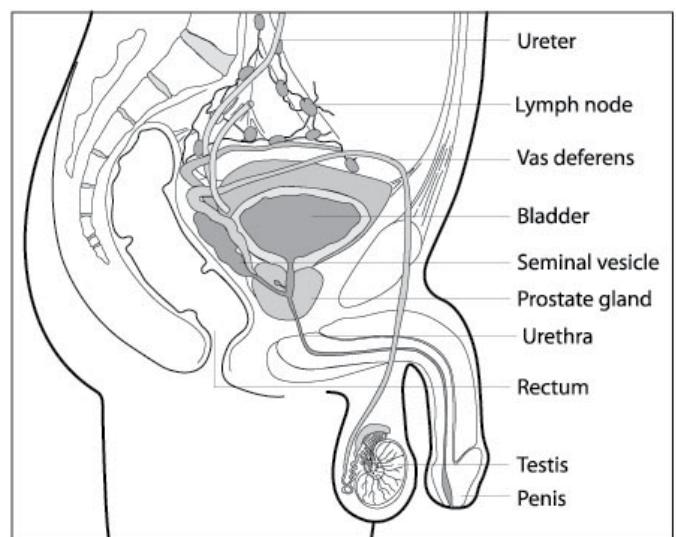


Illustration courtesy of Prostate Cancer Canada

## ■ What You Should Know About Prostate Cancer

Prostate cancer is the most common cancer diagnosed in North American men other than skin cancer. One of every six or seven men will develop prostate cancer during his lifetime. The exact cause is unknown. However, genetic, nutritional and environmental factors appear to play a role in its development.

Typically, prostate cancer begins in the outer part of the gland. When confined within the prostate, it is called localized prostate cancer. Prostate cancer may progress differently in each man. It may be relatively slow growing, but it can also be more aggressive with a tendency to spread (metastasize) to the lymph nodes, bones or other parts of the body. This latter form of prostate cancer can be life threatening.

## ■ Screening and Diagnosis

The best way to diagnose prostate cancer involves a digital rectal exam and a prostate specific antigen (PSA) blood test. Patients with localized cancer rarely have symptoms. New ways to detect prostate cancer early are being developed.

### Digital Rectal Exam

Through a digital rectal exam (DRE), your doctor may detect a cancer and determine whether it is confined to the prostate. Because the prostate lies in front of the rectum, the doctor can feel it by inserting a gloved, lubricated finger into the rectum. The DRE is not always accurate - many prostate cancers are situated deeper in the gland or are too small for detection, and not all prostate 'lumps' are cancerous. Once a cancer can be felt as a lump, it is considered more advanced than when detected only by a PSA blood test.

### PSA

Prostate-specific antigen (PSA) is a protein produced by both normal and cancerous prostate cells. When prostate cancer grows or when other prostate diseases (such as enlargement or inflammation of the prostate) are present, the amount of PSA in the blood may increase. The PSA also increases with age. If your PSA level is in the high range (or has increased since a prior test), your physician may recommend a prostate biopsy.

### Percent-Free PSA Ratio

This blood test measures how much PSA circulates by itself (unbound) in the blood and how much is mixed with other blood proteins. If PSA results are elevated and percent-free PSA ratio is low (10% or less), then prostate cancer is more likely to be present and a biopsy may be needed.

### Ultrasound

Transrectal ultrasonography (TRUS) is the most direct way to see the prostate gland. Ultrasound provides an image that can be used to measure the size of the prostate and can sometimes detect suspicious tissue. TRUS is almost always done in combination with a biopsy. Needle biopsies of the prostate are always done using an ultrasound for guidance.

### Biopsy and the Gleason System

A prostate biopsy removes small pieces of tissue from the prostate gland. Typically, between 10 and 12 biopsies are taken using a core biopsy needle. A pathologist will look at the prostate tissue under a microscope to compare cancerous tissue to normal tissue and establish a diagnosis of prostate cancer. When a tumour is discovered, the pathologist assigns a Gleason score or "grade" to the tissue, which reflects the aggressiveness of the cancer.

If the cancerous cells appear to resemble the normal prostate tissue, they are said to be well differentiated and considered to be Gleason grade 1 to 3. This means the tumour is not expected to be fast growing.

On the other hand, if the cells in question look fairly irregular and different from normal prostate cells, then they are poorly differentiated and are assigned a Gleason grade of 4 to 5. (It is rare to see a Gleason grade 1 or 2 cancer).

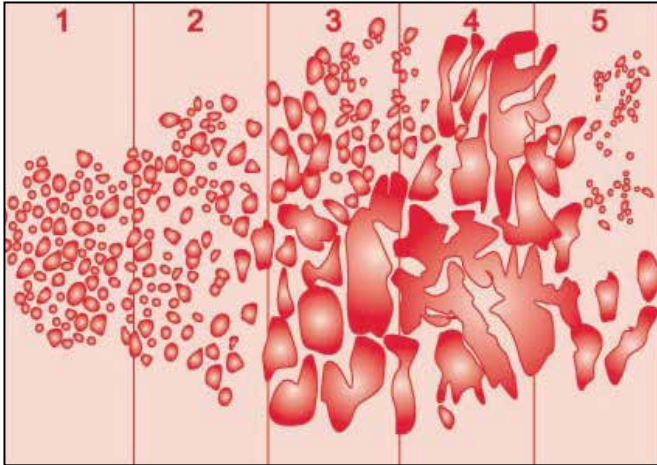


Illustration courtesy of Prostate Cancer Canada

The Gleason Grading System is used to evaluate prostate cancer cells. Cells close to normal are Grade 1; the most abnormal cells are Grade 5.

Because prostate cancer tissue is often made up of areas that have different grades, the pathologist will closely examine the areas that make up the largest portion of the tissue. Gleason grades are given to the two most commonly occurring patterns of cells.

Gleason grades describe and rate the cancer cells in two ways:

1. how the cancer cells look, and
2. how they are arranged together.

A Gleason score is determined by adding the two grades together. The Gleason score will be between 2 and 10 (e.g. 3 + 4 = 7 out of 10).

The biopsy can also indicate whether the cancer involves small nerves within the gland (perineural invasion), and how extensive the cancer is based on the number of positive scores.

## ■ Staging

“Staging” measures the extent of the disease at the time of diagnosis. Information about the size of the cancer in the prostate and whether the cancer has spread outside the gland is used to determine an “overall clinical stage.” This information is important in choosing treatment options. Additional tests may be needed to determine the clinical stage of intermediate or higher risk cancer.

### CT Scan

A computed tomography (CT) scan is an X-ray procedure that gives cross-sectional images of the body. The CT scan may help detect lymph nodes in the pelvis that are enlarged because of cancer. Generally, a CT scan is done only if the cancer is high risk (high PSA, high Gleason score, or abnormal DRE findings).

### MRI

Magnetic resonance imaging (MRI) is similar to a CT scan but uses magnetic fields instead of X-rays to create internal pictures of your body. MRI is better than CT at imaging the prostate to show cancerous areas and guide biopsy, detect cancer invasion upwards and into the surrounding areas and to guide surgery and radiation treatment. It is also useful for confirming a diagnosis when a bone scan indicates possible spread to the bone.

### Bone Scan

A bone scan test can determine if cancer cells have spread to bones. A Nuclear Medicine Technologist injects a small amount of radioactive material into the patient’s bloodstream and the patient returns three hours later for a scan. The radioactive material collects in the area where there are bone-activating cells. A scanner then pinpoints areas where the prostate cancer may have spread to the bones. Bone scans are only done on those with high risk disease (high PSA, high Gleason score, or abnormal DRE findings).

## Clinical Stage

“Clinical tumour stage” refers to whether or not a tumour can be felt (palpated) during an exam and whether it may have spread to lymph nodes or other organs.

Clinical stage is based on all information available before treatment. Your doctor may describe your prostate cancer clinical stage using the terms “TNM” or “T” with a number and letter. This is explained in the table below. Ask your doctor to discuss your clinical stage.

### Clinical Stage Diagnosis Terminology

T Stage			N Stage	M Stage	
T1 Tumour is not palpable nor visible by imaging	T2 Tumour is confined to the prostate	T3 Tumour extends beyond the prostate	T4 Tumour has invaded neighbouring tissues	N1 Metastasis in regional lymph nodes	M1 There are distant metastases; the cancer has spread beyond the regional lymph nodes
T1a Tumour found incidentally in less than 5% of prostate tissue sample	T2a Tumour involves 50% or less of one lobe	T3a Tumour extends beyond the prostate capsule on one side (unilateral extracapsular extension) or on both sides (bilateral extension)	The tumour is fixed or invades areas adjacent to the prostate other than the seminal vesicles, e.g. the bladder neck, the external sphincter, the rectum and the pelvic wall.	N1 Indicates that the cancer cannot be felt or seen by the naked eye	M1a The cancer has spread to non-regional lymph nodes
T1b Tumour found incidentally in more than 5% of prostate tissue sample	T2b Tumour involves more than 50% of one lobe but not both lobes	T3b Tumour has invaded the seminal vesicles		N2 Indicates that the cancer is confined to the prostate gland	M1b The cancer has spread to the bone.
T1c Tumour found during needle biopsy (e.g. because of elevated PSA)	T2c Tumour involves both lobes			N3 Indicates a large tumor in one or more lymph nodes	M1c The cancer has spread to other distant sites, with or without metastasis to the bone.
TX & TO			NX & MO	MX & MO	
TX Tumour cannot be assessed			NX Lymph nodes near the prostate were not or cannot be assessed.	MX Distant metastasis of cancer cannot be determined or assessed.	
TO No evidence of tumour			NO No regional lymph node metastasis	MO No metastasis of the cancer beyond the regional lymph nodes	

Chart courtesy Prostate Cancer Canada

Description of TNM Staging: T stands for Tumour; N stands for nodes (lymph nodes), and M stands for metastasis (spreading). Numbers assigned in these categories indicate how big the tumour is and how much the cancer has spread.

## ■ Treatment Options

Prostate cancer treatment depends upon the type of cancer, whether it has spread, the patient's age, general health, life expectancy and any prior prostate treatments they may have undergone. The three standard treatments for men with organ-confined prostate cancer are active surveillance, surgery (prostatectomy) or radiation therapy. To date, no study has directly compared these three options. This makes it difficult to compare outcomes in men treated with either surgery or radiation.

### Active Surveillance

For some patients with prostate cancer, the best choice may be active surveillance. It is considered as a treatment option if a cancer is not causing symptoms and is expected to grow slowly. Since prostate cancer often grows very slowly, many men who have the disease may never require treatment. Active surveillance is a way to delay or defer other treatment and potential side effects.

This form of monitoring is suitable for men whose prostate cancer falls into the low risk category, and who understand and agree with the follow-up plan. Typically, patients on an active surveillance program have regular PSA tests and prostate examinations. Additional prostate biopsies may be done to ensure that the cancer is not becoming more active. If there is a change in the prostate cancer then the man can decide to have active treatment such as surgery or radiation.

### Watchful Waiting

Watchful waiting involves having no treatment for your prostate cancer and no routine testing or monitoring. Rather, treatment will start if you experience symptoms, with the goal of treating the symptoms to make you feel better. Watchful waiting is suitable for men who are elderly, have other serious medical problems, or who don't want to take the risk of side effects of prostate cancer treatment.

### Radical Prostatectomy (surgery)

Surgical treatment for prostate cancer involves removing the entire prostate and seminal vesicles. When cancer is confined within the tissues, surgery alone can usually cure localized prostate cancer. The PSA level in the blood should fall to undetectable levels after prostatectomy.

There are two main types of prostatectomy – open **retropubic prostatectomy (RP)** and **laparoscopic prostatectomy (LP)**. Robotic assisted laparoscopic prostatectomy (RALP) procedures are also being conducted in larger Canadian hospitals.

**Retropubic Prostatectomy (RP)** involves the surgeon making a skin incision in the lower abdomen (about 4 finger breadths below the bellybutton to just above the pubic area). A pelvic lymph node dissection (PLND) may be done before removal of the prostate. The PLND can more accurately determine whether prostate cancer is present in the lymph nodes.

The prostate is removed from between the bladder and urethra. If possible, the surgeon spares the small bundles of nerves needed for erections on either side of the prostate gland ('nerve sparing surgery').

With the prostate removed, the bladder opening is sewn to the urethra. A catheter is placed in the penis and remains in place while the tissues heal. Patients can expect a hospital stay of two or three days. Staples are removed about seven to 10 days after surgery, and the urinary catheter is removed one to three weeks after surgery, depending on the surgeon's recommendation.

**Laparoscopic Prostatectomy (LP)** is a minimally invasive technique used to remove the prostate gland in patients with prostate cancer. The surgeon makes four or five small incisions in a fan shape across the upper abdomen. A camera is inserted through one of the incisions so the surgeon can view the area with a laparoscope. The LP is as effective in treating patients with prostate cancer as open surgery; patients can

expect a quicker return to daily activities and less surgical blood loss. Patients undergoing LP may be in hospital for two or three days. Return of urinary and sexual function following both open and LP procedures are similar. (See **Side Effects**).

## Lymph Node Dissection

The lymph nodes are often the first location where prostate cancer spreads. A physician can usually estimate the likelihood that cancer has spread to the lymph nodes based on a rectal examination, PSA, and biopsy result. If it is likely that cancer has spread to the lymph nodes, the physician may surgically sample, remove and examine the lymph nodes under a microscope. This is often done during a radical prostatectomy in some intermediate and most high risk cases. Other techniques are being developed to study lymph nodes without surgically removing them.

## Side Effects of Surgery

Surgical risks associated with all radical prostatectomy techniques (RP and LP) are similar to those of any major surgery. The level of risk depends largely on the patient's overall health and age. Rare risks include cardiac or pulmonary events, blood clots or injuries to areas surrounding the prostate. The most common side effects of radical prostatectomy relate to urinary control and sexual function.

**Urinary Control** - Following surgery, significant bladder control often returns within 12 weeks and continues to improve over the next 12 months. Mild stress incontinence (passing a small amount of urine when coughing, laughing or sneezing) is common following surgery. Some men choose to wear pads to protect themselves from unexpected leakage. About 90 per cent of patients who undergo prostatectomies will have excellent return of urinary control and require no pads or other means of protection.

Return of function often depends on pre-operative urine control and patient weight and age. For example, men with larger abdomens (that press down on the bladder) may have a slower recovery. About

one or two per cent of patients will have persistent, severe post-operative incontinence (leakage of urine) that may require medical intervention. Physiotherapists may provide assessments and advice to men before and after surgery. Radiation therapy following surgery may also interfere with the return of urinary control.

**Sexual Function** - Sexual dysfunction is a common problem for men. Sexual problems become progressively more common with aging, heart disease, high cholesterol and diabetes.

Prostate cancer and its treatment can significantly impact sexual function. Nerve-sparing prostatectomy is done if the tumour is not too close to the nerves (neurovascular bundle) surrounding the prostate. A unilateral nerve-sparing procedure will save the nerves on one side of the prostate. A bilateral nerve-sparing procedure saves the entire neurovascular bundle on both sides of the prostate.

Patients with locally advanced tumours cannot have nerve-sparing surgery because of concerns about leaving cancer cells behind. Occasionally, other issues (e.g. scarring, unusual blood vessel anatomy, large prostates) make nerve sparing difficult or impossible. The surgeon cannot predict these factors before operating. Men who are under age 60, sexually active, able to achieve erections, and have both nerves spared usually have the best chance to regain sexual function.

**Erectile Recovery** - Studies show that even with bilateral nerve-sparing surgery, it may take 18 to 24 months before a patient recovers reasonable erections. However, major improvement usually occurs in six to 18 months. There are several possible reasons for this, such as nerve injury that occurs during surgery, postoperative psychological issues, or a history of infrequent, non-rigid erections. All of these conditions affect oxygen flow and health of penile tissues.

Successful recovery of erectile function is highly dependent on the patient, his partner, and their



knowledge of treatments available to assist in the recovery of erections after surgery. Open sexual communication between partners is essential. Other issues, such as loss of sexual desire, difficulty reaching orgasm, ejaculatory problems or sexual pain should also be addressed.

Reproductive health, fertility issues and sperm banking counseling should be discussed with your physician. The nurse navigator is available to offer support, guidance, and to coordinate treatment options if necessary.

## Radiation Therapy

Radiation therapy is an effective non-surgical treatment of prostate cancer for many patients. It is also used to help shrink tumours and relieve pain in men with advanced disease. The type of radiation therapy available varies with the facility. Each patient receives a customized treatment plan depending on the nature of the cancer and the patient's unique symptoms and overall health. The two main types of radiation therapy are brachytherapy and external beam radiation.

### Brachytherapy

Brachytherapy delivers high doses of radiation to a very confined region, making it possible to target tumour cells within the prostate while sparing nearby non-cancerous tissues including the bladder and rectum.

#### Brachytherapy can be done in two ways:

1. low-dose-rate or seed brachytherapy which is the implantation of radioactive "seeds" into the prostate, used for all stages of prostate cancer although some higher-risk patients need additional external beam radiotherapy or even hormonal therapy; or
2. high-dose-rate brachytherapy which uses a single radiation source at the tip of a metal wire stopping at different locations to create a similar radiation pattern. It is not done for low risk patients but used for intermediate and high-risk patients.

The brachytherapy **surgical implant procedure** is a day procedure that takes about 45 minutes. Patients are discharged home two or three hours afterward. Most implants are done using a general anaesthetic, or under spinal or local anaesthesia. The radiation oncologist does the implantation into the prostate through the skin of the perineum (space between the anus and the scrotum). The seeds stay in the prostate gland permanently.

Men who have prostate low-dose-rate seed brachytherapy will emit tiny amounts of radiation from their bodies. The amount decreases over time. Half of the radiation is gone in two months, about 80 per cent in six months, and virtually all of it in two years. High-dose-rate brachytherapy does not leave any radiation within the patient after the procedure.

### Side Effects of Brachytherapy

Most patients tolerate prostate brachytherapy well, but have temporary side effects. Serious complications can occur but are uncommon. The main side effects of brachytherapy are related to urinary control, sexual function and rectal irritation.

- **Urinary Control** - Most men experience some urinary symptoms after the procedure. About half will have moderate symptoms for several months (urgency to void, getting up at night to void, slowing of the urinary stream, painful urination). By 12 months, 90 per cent of urinary symptoms should return to normal. By seven years after brachytherapy, most patients (92.5 per cent) have few or no urinary symptoms. Patients with larger prostate volume, a history of poor urinary function and those on hormone therapy are more likely to have irritative and obstructive urinary symptoms after brachytherapy. Five to 10 per cent of patients will need a Foley catheter for urinary obstruction (most for less than a week, three per cent of all patients for several weeks or months). This is more often the case with patients who have urinary issues before implant.

- **Sexual Function** - Younger patients and those with better pre-treatment erectile function are likely to recover more quickly after treatment. Some men may experience painful ejaculation following prostate brachytherapy. This can be a short-term problem or a persistent one. The cause is not known, but is likely due to radiation irritation of the urethra. Many patients will improve their function with oral erectile aid medications. After three years, approximately 50 to 70 per cent of patients who were previously able to have erections continue to do so.
- **Rectal Irritation** - One in three patients are affected by mild rectal irritation (small amount of blood from the rectum, loose bowel movements, rectal pain/discomfort). These symptoms should disappear within three months. One to two per cent of patients may have rectal bleeding that requires a laser photocoagulation procedure. Serious rectal injury is rare.

### External Beam Radiation Therapy (EBRT)

In this treatment, the prostate cancer is bombarded with high energy X-rays by a machine called a linear accelerator. Patients get their own individual treatment plan from a radiation oncologist, and have a series of daily treatments, generally a few minutes per day, five days per week, for seven or eight weeks. Unlike surgery and brachytherapy, external beam radiation therapy can be successfully used for men whose cancer has clearly spread to other areas. However, cure rates for such patients would be lower.

Patients with medium or high-risk prostate cancer may need a combination of hormonal therapy and radiation therapy because the addition of hormones (Lupron®, Zoladex®, Casodex®, Eligard®, and Suprefact®) improves the effectiveness of radiation therapy. Hormone therapy is generally started two to six months before the start of radiation and may continue for up to three years.

Following radiation therapy the cancer slowly shrinks and the PSA level in the blood slowly declines. It usually takes 12 to 36 months after radiation for a rectal exam to be normal (in cases of a palpable tumour) and for the PSA to reach its lowest level.

A rising PSA (level of 2.0 ng ml<sup>-1</sup>) following treatment is usually associated with eventual cancer recurrence. An elevated PSA after treatment may precede clinical signs of disease by several years. Patients who have local relapse (cancer recurrence in the prostate) after radiation therapy may be considered for a radical prostatectomy. Other patients may be offered hormone therapy.

### Side Effects of Radiation

The most common side effects result from the effect on organs near the prostate, specifically the rectum and bladder. Most patients tolerate radiation well, but develop side effects during treatment and for a few weeks afterward. These side effects can include symptoms like urgency to urinate, urinary frequency, diarrhea, or the passage of small amounts of blood or mucus from the rectum or the bladder. These side effects are rarely so severe that treatment needs to be interrupted or even discontinued. In about 90 per cent of patients the side effects clear up within six weeks of treatment completion. The remaining 10 per cent may have more long lasting or even permanent side effects.

- **Urinary Control** - Permanent and severe urinary incontinence affects less than one per cent of men treated with external beam radiation therapy.
- **Sexual Function** - Younger men tend to regain their erectile function better than older men following radiation therapy. About 50 per cent of men who have normal erections before radiation therapy will regain their ability to have erections within five years.

## Hormone Therapy

Prostate cancer is sensitive to hormone levels. The growth of prostate cancer cells slows significantly when a patient's source of testosterone is removed or blocked. This can be done through medications that alter the way hormones work, or by surgery to remove the testicles.

Hormone therapy is often recommended for patients having radiation therapy, or as the only treatment for patients whose prostate cancer has spread to other parts of the body. Hormone therapy alone is unlikely to cure prostate cancer but can treat or delay symptoms and slow down the growth of prostate cancer.

**Orchiectomy** is an operation to remove the testicles. Orchiectomy removes the source of testosterone. The advantage is that the method is permanent and makes hormone injections unnecessary. However, since hormonal therapy is not a permanent solution, other surgical or radiation therapies may still be necessary.

**Luteinizing hormone releasing hormone (LHRH)** drugs (Zoladex®, Lupron®, Eligard®, or Suprefact®) are injectable medications that slow down the production and release of testosterone by the testes. They are given at intervals of one, three or four months. The main benefit of these medications is that therapy is reversible.

### Side Effects of Hormone Therapy

The side effects of both orchiectomy and LHRH are similar. They include hot flashes, loss of sex drive, impotence, fatigue, weight gain, memory loss, mood changes, and breast enlargement or tenderness. Long term side effects include decreased bone density which may lead to osteoporosis and bone fractures, and low red blood cell count (anemia). Hot flashes may decrease with time. Your doctor may suggest medications or dietary changes to help reduce the side effects of hormone therapy.

## Anti-androgens (Casodex® or Flutamide®)

Anti-androgen medications are often used in combination with orchiectomy or LHRH drugs in a process called total or combined androgen blockade.

Even after orchiectomy or during treatment with LHRH drugs, a small amount of androgen is still produced by the adrenal glands. Anti-androgens block the ability of prostate cancer cells to use testosterone. Drugs of this type are taken as pills, one to three times a day. A doctor may give an anti-androgen to block the temporary increase in testosterone "flare" that may occur with LHRH drugs.

### Side Effects of Anti-Androgens

Side effects of anti-androgens in patients already treated by orchiectomy or with LHRH drugs include diarrhea, loss of energy, and nausea. Anti-androgens can also cause inflammation of the liver. Physicians need to know the medicines their patients are taking while on anti-androgens and may order liver function tests.

## Intermittent Hormone Therapy

All prostate cancer treated with hormone therapy eventually becomes resistant to this treatment over months or years. Some physicians believe constant exposure to hormone drugs might promote resistance, and recommend "intermittent treatment" with these drugs: hormone treatments are stopped when a man's PSA drops to a low level and remains stable. If the PSA level begins to rise, the drugs are restarted. One advantage of this is fewer side effects.

## Chemotherapy

In addition to hormone treatment, new anti-cancer drugs are being used in treating some forms of cancer. Chemotherapy for prostate cancer has evolved over the past 20 years with prostate cancer now considered a "chemo-sensitive" disease. This means that chemotherapy may allow prostate cancer patients to live longer.

Since research shows chemotherapy can improve survival rates for patients with advanced prostate cancer, there may eventually be an increased role for such therapy in earlier disease stages. Patients may be asked to consider enrolling in clinical trials to further evaluate the role for such promising treatments.

## Supportive Care

The Saskatchewan Cancer Agency recognizes that dealing with cancer causes distress to patients and their family members. Oncology social workers are available to help patients and their loved ones solve problems associated with cancer treatment. These services are available through the Cancer Centres in Saskatoon and Regina. There is no additional cost to patients, as the services are considered part of medical treatment. Services may include supportive counseling, patient education, assistance with problem solving, and referrals to community agencies and support groups. Contact the Cancer Centres directly for assistance (see back cover).

Many support services are available to meet your physical and emotional needs including those to address concerns relating to sexual health and incontinence. The Nurse Navigator is available to discuss these resources with you. Resources include but are not limited to:

- Specialist Referral
- Pharmacist
- Dietitian
- Psychologist
- Social Worker
- Peer Support groups (both rural and urban)

## Resources

**Leslie and Irene Dubé Urology Centre of Health  
St. Paul's Hospital, Saskatoon  
306-655-5420  
Nurse Navigator: 306-655-5420**

**Prostate Assessment Centre  
Pasqua Hospital, Regina  
306-766-6215  
Nurse Navigator: 306-766-8498**

**Saskatchewan Prostate Assessment Pathway**  
Search "*Sask Prostate Pathway*" in web browser

**Saskatchewan Cancer Agency  
[www.saskcancer.ca](http://www.saskcancer.ca)  
639-625-2010**

- **Saskatoon Cancer Centre  
306-655-2662**
- **Allan Blair Cancer Centre  
306-766-2213 (Regina)**

**The Canadian Cancer Society -  
Saskatchewan Branch  
[www.cancer.ca](http://www.cancer.ca)  
1-877-977-4673**

**Medline Plus  
[www.nlm.nih.gov/medlineplus/  
prostatecancer.html](http://www.nlm.nih.gov/medlineplus/prostatecancer.html)**

**Support Groups  
Prostate Cancer Canada  
1-888-255-0333  
[www.prostatecancer.ca](http://www.prostatecancer.ca)  
(prostate support groups listed on this site)**

**Nutrition  
Canada's Food Guide  
[ww.canadafoodguide.org](http://www.canadafoodguide.org)**

**Academy of Nutrition and Dietetics  
[www.eatright.org](http://www.eatright.org)  
1-800-877-1600**

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