

# PROSTATE CANCER WHAT YOU NEED TO KNOW

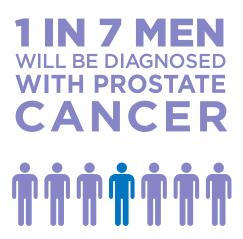
# **ARE YOU AT RISK? THINK ABOUT IT!**





Halte au cancer de la prostate. The Force Against Prostate Cancer.

Founded in 2003, PROCURE is the only charitable organization in Quebec to be exclusively dedicated to the fight against prostate cancer through research, awareness, education and support for men who have this disease and their families.

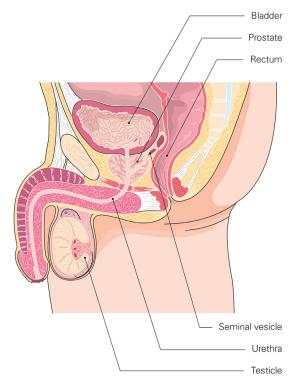


#### **ONE IN SEVEN MEN**

We are here to help him To support his family, friends and loved ones We are here for anyone who is concerned or worried about prostate cancer

#### THE PROSTATE

The prostate is a gland that has more or less the size and shape of a walnut. It is located just below the bladder, and it surrounds the urethra – the tube that carries urine out of the body.



• Anatomy of the Prostate and the Surrounding Organs Prostate secretions make up most of the semen, which is a milky liquid bearing the spermatozoa from the testes.

The prostate also produces a protein called prostate specific antigen (PSA). Some of the PSA may enter the bloodstream, more so if there is a problem affecting the prostate. A blood test can help measure PSA levels. PSA testing may

therefore be used to diagnose prostate cancer and to monitor its progress.

With age, a man's prostate becomes enlarged and may compress the urinary tract (urethra), causing symptoms such as difficulty urinating and an inability to completely empty the bladder. This condition is called benign prostatic hyperplasia (BPH) and is mostly unrelated to cancer. A visit to the doctor is recommended to confirm a diagnosis of BPH.

#### **PROSTATE CANCER**

Prostate cancer generally progresses at a fairly slow pace. When detected early, it is highly curable. Nowadays, advanced techniques are used to produce an accurate diagnosis and estimate the prognosis. In addition, new and more effective means of treatment make it possible to halt or slow the progression of the disease. In most cases, the prognosis is good.

The exact causes of prostate cancer remain largely unknown, but research has highlighted certain risk factors

- **Aging** the risk of prostate cancer increases in men over 55 or 60;
- **Family history** having a father or brother with this type of cancer increases the risk;
- Race as an example, African Americans and Haitians are exposed to a higher risk compared with Asians;
- Diet (red meat, animal fats), as well as certain lifestyle habits, including physical inactivity;

 Some environmental factors are increasingly being linked to prostate cancer.

#### **SYMPTOMS**

Prostate cancer usually causes no symptoms. It is then a so-called "silent disease." It may be discovered by chance, after a PSA blood test or during a routine prostate examination. The doctor may have a suspicion of cancer upon detecting an area of induration (hardening) during a digital rectal examination. This would be the most common clinical sign. In one out of ten cases, prostate cancer was detected by a simple rectal examination.

The occurrence of any symptoms associated with BPH may also be of concern, since they can be caused by a cancerous tumour compressing the urethra.

### **PSA TESTING**

Blood PSA testing is the main diagnostic tool for the detection of prostate cancer, but it is not perfect. There may be an increase in PSA even though there is no cancer, such as when the patient has BPH, inflammation, or a urinary tract infection. Such testing is however very useful when attempting to detect prostate cancer.

Any man who is over 50 years of age should ask his doctor whether a digital rectal examination and a PSA test are relevant in his case. If a man has a family history of prostate cancer, he should consider having such testing as soon as his 40<sup>th</sup> birthday.

For more information, please visit procure.ca and consult our PSA web page.

The doctor will take into account his observations during the rectal examination and the PSA test in the decision to go ahead with the diagnostic process.

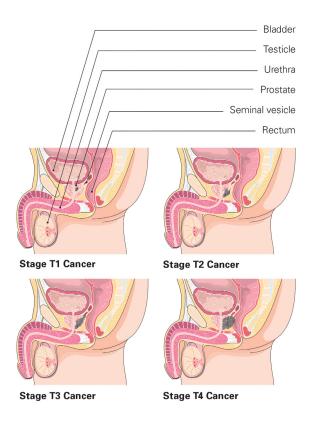
## DIAGNOSIS AND STAGING OF PROSTATE CANCER

The doctor will first order a transrectal ultrasound - a probe inserted into the rectum - and a biopsy. If the outcome of the biopsy confirms the occurrence of cancer, the pathologist (a specialist in tissue analysis) will determine the grade of the cancer, i.e. its aggressiveness, depending on whether the shape and organization of the sample cells appear more or less normal. The higher the number - up to 10 on the Gleason score - the more malignant is the tumour, and therefore the more likely to progress.

After a diagnosis of prostate cancer, the doctor will determine the grade and stage. Before considering treatment, the doctor will establish how aggressive the cancer is (grade), where the cancer cells are located, and whether or not they have spread beyond the prostate (stage).

Biopsy makes it possible to confirm the occurrence of cancer and to determine its degree of malignancy, but other tests will be required to determine the stage, i.e. its containment or its spread elsewhere in the body – in particular

to the lymph nodes and bones. The exact stage of the cancer may only be determined after surgery, such as the removal of the gland and seminal vesicles. Here again, a pathologist will be involved in this procedure.



#### **STAGING**

At this point, the patient will be treated unless the doctor decides to defer treatment and only monitor the patient periodically, as in the case of in the elderly, if the cancer is localized and is not aggressive, or if therapy may do more harm than good.

STAGE	DESCRIPTION
T 1	The tumour is not detectable during a digital rectal examination and is confined to the prostate.
T2	The tumour may be detected during a digital rectal examination but is confined to the prostate.
Т3	The tumour is spreading beyond the prostate.
T4	The cancer has spread to nearby organs and perhaps elsewhere in the body.

#### **TREATMENTS**

The choice of treatments depends on several factors:

- Diagnostic data: PSA, stage, grade, whether or not the cancer has metastasized:
- Age, life expectancy, health status, family history;
- Patient's preferences, concerning his sex life for instance. No decision is taken until the patient has been fully informed of the pros and cons and has given his consent.

**Prostatectomy** - Removal of the prostate. Three procedures: open conventional surgery, laparoscopic surgery or robot-assisted surgery. A perineal approach may also be used but rarely.

External beam radiotherapy - Exposure to radioactive rays directed with pinpoint accuracy on the tumour (indeterminate number of sessions). **Brachytherapy** – Implantation of radioactive seeds in the prostate.

There are other methods such as cryotherapy (destruction by freezing), but they are used uncommonly or on an experimental basis.

**Hormonal therapy** – This treatment targets the source of the problem by depriving the tumour of the male hormone – mainly testosterone – that feed it. The duration of this treatment varies.

These methods have shown their effectiveness, but they also produce side effects that should be discussed with the health care team. They are often used in combination, e.g. prostatectomy with radiotherapy, or radiotherapy with hormonal therapy. Because each case is different, the approach used will be different also.

To learn more, visit **procure.ca** and view our web page dedicated to treatments.

If the above methods do not succeed, or if the cancer is too far advanced, doctors may suggest chemotherapy. In addition to relieving pain, chemotherapy often improves the patient's quality of life and improve survival.

In addition, some new therapeutic or palliative agents are very promising. Given all the progress made in recent years, we may not be far off from the day when prostate cancer is definitely beaten.

#### **PROCURE**

For over ten years, PROCURE strives to redefine the boundaries of research and knowledge through an ongoing dialogue with the public and healthcare community by providing the information and support needed through means such as:

- ♂ a rich and comprehensive website, available in French and in English;
- ♂ a Prostate Cancer Support & Awareness Network across the province of Quebec;
- conferences and special events;
- or publications and a free book on prostate cancer.

PROCURE has also established a biobank of biological samples and data on men with prostate cancer.

Please join our organization today. Encourage the men in your life to be examined. This might very well save their life!

If you wish to donate to our cause, financially or otherwise, or to request more information about prostate cancer, please contact us.

1 855 899-2873 • info@procure.ca

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Halte au cancer de la prostate. The Force Against Prostate Cancer. 1320, Graham Blvd, Suite 110 Town of Mount-Royal, QC H3P 3C8

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