

Overview of Prostate Cancer

What is Prostate Cancer?

The prostate is a gland found only in men, and its job is to produce the fluid in semen. Prostate cancer occurs when cells in the prostate divide and grow uncontrollably, resulting in cancer that may spread to other parts of the body (metastasize). As of 2022, prostate cancer is the most common cancer diagnosis for men, and the second leading cause of cancer death among men.

Symptoms

Unfortunately, prostate cancer may not have symptoms in its early stages. More advanced stages of prostate cancer may have the following symptoms:

- Trouble or frequent urinating
- Weak or interrupted in the stream of urine
- Blood in the urine
- Blood in the semen
- Bone pain
- Unexplained weight loss
- Erectile dysfunction
- Painful ejaculation

Please note that many of these symptoms can be caused by health conditions other than cancer. **Having any of these symptoms does not necessarily mean cancer.** However, if you're worried, make an appointment to be checked out by a doctor.

Causes and Prevention

While there is no definitive answer as to what causes prostate cancer, there are some risk factors that increase your chances of developing prostate cancer.

Being male. Women have no prostate gland, and so can't develop prostate cancer.

Being African American. Studies have shown that African American men are more likely to develop prostate cancer and are more likely to develop more aggressive types of prostate cancer.

Being elderly. Men over the age of 65 are much more likely to develop prostate cancer.

Family history of prostate cancer. If you have a first-degree relative who's been diagnosed with prostate cancer, you're more likely to develop prostate cancer yourself.

Unfortunately, there is no sure way to prevent prostate cancer. But you can make some lifestyle changes that will help decrease your risk of developing it. These include limiting high-fat foods, increasing the number of vegetables and fruits in your diet, and getting enough physical activity.

Screening and Diagnosis

Screening is looking for cancer before a person has any symptoms. If found early, cancer is easier to treat and possibly cure. However, if symptoms have begun to appear, the cancer may have already begun to spread, making it more difficult to treat. This is why screening is so important.

To test for prostate cancer, doctors will take a blood sample and test for prostate-specific antigens. Depending on how high the levels are (usually above 4 ng/ml of blood), the doctor may order further tests, such as a tissue biopsy. It's important to note that there are plenty of other reasons why your prostate-specific antigen levels may

be elevated, such as being older, or having an enlarged prostate. In essence, this test may be an indicator, but further tests should be done to confirm the diagnosis.

Another way to test for prostate cancer is the Digital Rectal Exam (DRE). For this test, the doctor will put on gloves and insert his finger into the rectum to feel the prostate gland. The doctor is feeling for any bumps or hard areas that may be indications of cancer. This may cause some discomfort, but it isn't usually painful.

If your tests are abnormal in any way, the doctor may order a prostate biopsy. This involves removing a small sample of the prostate and testing it for cancer. This can also help determine how advanced the cancer is.

Treatment

There are several treatment options once prostate cancer has been diagnosed. Your treatment will depend on a number of factors, such as your general health, your age, how advanced the cancer is, and your own choices. Treatments that your doctor might suggest are

Active Surveillance. This is a treatment where the cancer is monitored for changes. Because prostate cancer often grows slowly, many doctors opt for this treatment, especially if their patients have poor overall health.

Chemotherapy. Chemo is usually used if the prostate cancer has spread to other parts of the body (metastasized) and/or if hormone therapy isn't working. Chemo involves a series of drugs, given either in pill form or directly into your veins. It isn't a standard treatment for prostate cancer, however.

Cryotherapy. Doctors can use very cold temperatures to freeze and kill prostate cancer cells. The process also destroys the prostate itself. Usually, it's a treatment that's prescribed if the cancer has returned after radiation therapy, and not as a first resort.

Hormone therapy. This treatment uses surgery or medications to lower the levels of androgens made by the testicles (for example, testosterone). If surgery is used, the testicles are completely removed. Because some men are worried how it will look, artificial testicles can be inserted afterwards, or you may choose to go with the medication route to lower your androgen levels. This is done to help control or shrink the cancer.

Immunotherapy. This method of treating prostate cancer involves using medications to help your own immune system recognize and attack cancer cells. Studies have shown that immunotherapy seems to help men live longer, but it hasn't been shown to cure prostate cancer.

Radiation therapy. Using high-energy rays, doctors can kill cancer cells. This treatment might be used if the cancer hasn't spread past the prostate, or as part of a treatment plan for cancer that has spread to other parts of the body.

Surgery. The main type of surgery for prostate cancer is to remove the entire prostate gland (radical prostatectomy). You do not need your prostate to live, however there are possible side effects from doing so, including loss of control of your bladder and erectile dysfunction.