

Prostate Cancer

The Prostate

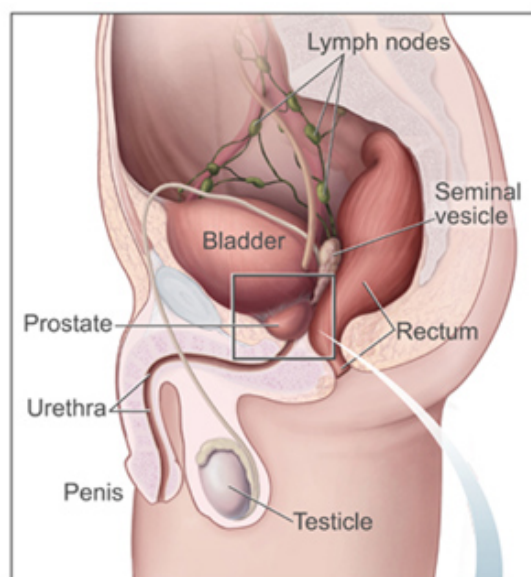
The prostate is a walnut-sized gland in a man's reproductive system. It is located below the bladder and in front of the rectum. See Figure.1 It surrounds the upper part of the urethra – the tube that empties urine from the bladder. If the prostate grows too large, the flow of urine may be slowed or stopped.

About Cancer

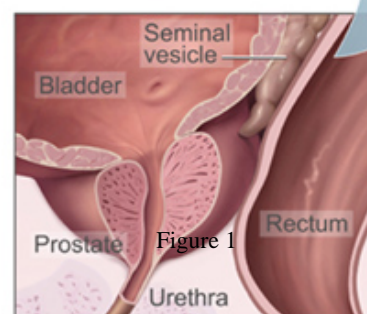
Cancer is a group of many different diseases that have some important things in common. Cancer affects cells, the body's basic unit of life.

Sometimes, cells keep dividing when new cells are not needed. These cells form a mass of extra tissue, called a growth or tumor. Tumors can be benign or malignant.

- Benign tumors are not cancer. They often can be removed and in most cases, they do not come back. Cells in benign tumors do not spread to other parts of the body. Most important, benign tumors are rarely a threat to life.
- Malignant tumors are cancer. Cells in malignant tumors are abnormal and divide without control or order. These cancer cells can invade and destroy the tissues around them. Also, cancer cells can break away from a malignant tumor and enter the bloodstream or the lymphatic system. This process is the way cancer spreads from the original (primary) tumor to form new tumors in other parts of the body.



This shows the prostate and nearby organs.



This shows the inside of the prostate, urethra, rectum, and bladder.

Figure 1
The prostate and surrounding area

Prostate Cancer

Cancer of the prostate is a disease in which malignant cells are found in the prostate. The causes of prostate cancer are not well understood. Doctors cannot explain why one man gets prostate cancer and another does not. Although several other cell types are found in the prostate, more than 99% of prostate cancers develop from the glandular cells. The medical term for a cancer

that starts in glandular cells is adenocarcinoma. Because other types of prostate cancer are so rare, if you have prostate cancer, it is almost certain to be adenocarcinoma.

Treatment

Different types of treatment are available for prostate cancer. Some treatments are standard – the currently used treatment – and some are being tested in clinical trials.

Choosing the most appropriate cancer treatment is a decision that ideally involves the patient, family and health care team. For a detailed description of treatment options, ask your nurse for a copy of “Multidisciplinary Prostate Cancer Clinic: A Guide to Treatment Options.”

Types of Standard Treatment

Active Surveillance

Because prostate cancer often grows very slowly, some men – especially those who are older or have other serious health problems – may never need treatment for their prostate cancer. Instead, their doctors may recommend active surveillance, an approach commonly known as “watchful waiting.” This approach involves closely monitoring the cancer without active treatment such as surgery or radiation treatment.

Surgery

Surgery to remove the prostate is called prostatectomy. If surgery is your best treatment option, your doctor will discuss the procedure with you.

Radiation Treatment

Radiation treatment uses high-energy X-rays or other types of radiation to kill cancer cells or keep them from growing. External beam radiation is a common type of radiation therapy for prostate cancer.

Medical Treatment

Medical treatments include hormone therapy, chemotherapy and new drugs which disrupt a particular function within the cancer cell.

Clinical trials are people-based studies – as opposed to animal or lab studies – of new drugs or procedures. Doctors use clinical trials to learn whether a new drug is safe and effective in patients. Such studies are vital to the development of new treatments for diseases such as cancer. There are many types of these new drugs. Many of them are intended to disrupt a particular chemical pathway or function within the cancer cell. Clinical trials exploring the effectiveness of new prostate cancer drugs are usually available through major cancer centers such as M. D. Anderson.

Medical treatments for prostate cancer can usually be stopped or changed, versus surgical treatment which is permanent.