Prostate Cancer

The prostate is a walnut-sized gland located just below the bladder in men. It surrounds the top portion of the male urethra (the tube that transports urine and semen out of the body). The gland's main function is to produce semen (a thick fluid that nourishes and transports sperm). Prostate cancer (an abnormal, uncontrolled growth of cells originating in the prostate gland) is the most common cancer, and the second leading cause of cancer deaths, among American men. Although the majority of men who reach age 80 are found to have prostate cancer, this condition alone may not contribute to serious harm if it does not spread. The July 9, 2008, issue of JAMA includes an article about treatment of prostate cancer. This Patient Page is based on one previously published in the November 15, 2006, theme issue of JAMA.

DIAGNOSTIC TESTING FOR PROSTATE CANCER

Doctors and medical groups do not agree on when men should be screened (routinely tested) for prostate cancer because of controversy about the benefits vs risks of early treatment. The most often used screening tests include:

- **Digital rectal examination (DRE)**—A doctor feels the prostate gland by passing a gloved finger into the patient's rectum to find hard or lumpy areas of the gland, which may represent an abnormality.

- **Blood test (to detect a substance called PSA, prostate-specific antigen)**—It is important to understand that the test is not perfect. Many men with mildly elevated PSA levels can have noncancerous prostate enlargement, which is a normal part of aging, whereas men with prostate cancer may have normal levels of PSA.

Prostate cancer is a very individual-specific disease. Discussions between the patient and his doctor are important to decide about testing and treatment. Based on an individual's situation, additional tests may be considered.

INITIAL TREATMENT OPTIONS

Decisions regarding the best treatment for you depend on a number of factors. These include your age, life expectancy, overall health status, and the growth and spread of the tumor, along with your doctor's recommendations.

- **Watchful waiting (expectant management)**—Conservative care involves watching for new signs or symptoms with regular checkups and testing.

- **Surgery**—The most effective way to cure prostate cancer is to undergo a radical prostatectomy (removal of the prostate gland). This treatment can result in subsequent problems regarding impotency (difficulty having an erection) or incontinence (problems with control of urination).

- **Radiation therapy** (treatment with high-energy x-rays to kill or shrink cancer cells)—There are 2 types of therapeutic approaches: external beam (radiation comes from outside the body) and brachytherapy (internal radiation from radioactive materials placed directly into the prostate).

FOR MORE INFORMATION

- American Cancer Society [www.cancer.org](http://www.cancer.org)
- American Urological Association [www.urologyhealth.org](http://www.urologyhealth.org)

INFORM YOURSELF

To find this and previous JAMA Patient Pages, go to the Patient Page link on JAMA’s Web site at [www.jama.com](http://www.jama.com). Many are available in English and Spanish. A Patient Page on grading of prostate cancer was published in the October 3, 2007, issue of JAMA.

Sources: American Cancer Society, American Association of Clinical Urologists, American Urological Association

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