

HOW IMPORTANT IS FINDING PROSTATE CANCER EARLY?

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THE DEATH RATE FROM PROSTATE CANCER HAS DECREASED in the United States over the last ten years, probably because of the earlier detection, diagnosis, and treatment made possible by prostate cancer screening (testing), searching for prostate cancer in men without symptoms, or changes in the body caused by cancer.

Detecting Prostate Cancer Early

Screening for prostate cancer appears to trigger a chain reaction that may help save lives: early detection, early treatment, and fewer deaths from prostate cancer. See page 38 for more information about the American Cancer Society's recommended prostate cancer screening guidelines.

RECOMMENDED SCREENING TESTS

Getting screened for prostate cancer makes it more likely that any cancer present will be found at an early stage, and more likely that it will be curable. Since the early 1990s the American Cancer Society and the American Urological Association have recommended screening for prostate cancer through two methods: the digital rectal examination, a physical exam in which the doctor inserts his or her gloved finger into the rectum to detect any irregularity in the nearby prostate gland's surface, and the prostate-specific antigen test, a blood test that measures levels of a protein made by the prostate. (See chapters 5 and 6 for more

information about these screening tests.) Prostate-specific antigen (PSA) testing uses chemical methods to provide a PSA number indicating how much of the protein is in the blood, while the digital rectal examination (DRE), depends upon a doctor's ability to physically detect an abnormality in the prostate. A combination of both the DRE and PSA is most effective in finding prostate cancer.

High PSA levels do not always mean that prostate cancer is present. Benign prostatic hyperplasia (enlargement of the prostate; BPH) and prostatitis (inflamed

prostate) may also cause the PSA level to be increased. Only about 10 percent of men who are screened for prostate cancer will have an elevated PSA level, and only one third of those will have prostate cancer.

Detect Cancer Earlier through PSA Testing

My father never went for a PSA check until, upon his retirement, I convinced him to have a PSA test. His PSA was extremely high. Despite hormonal therapy, he died of prostate cancer. I strongly urge all men to follow prostate cancer screening recommendations and undergo testing for prostate cancer.

— Ithor

Early Detection Was a Lucky Break

When I had the exam and finally confirmed that it was cancer, in the middle of panic and fear, I still felt lucky. It was detected early. If I had not had regular checkups, if I had waited until things got more serious and discovered it after cancer cells had spread, I would feel completely differently.

— Tieh Huei

THE POSITIVE EFFECTS OF SCREENING

When a population is screened (tested) for prostate cancer, there is an immediate rise in prostate cancer incidence (the total number of new cases diagnosed in a year). Screening allows doctors to diagnose prostate cancer early, before it advances to more critical stages and makes itself known through symptoms. Screening also allows for diagnoses in younger men. According to the National Cancer Institute, men today are diagnosed with prostate cancer up to 5 years earlier than they were before screening was introduced.

Early study results support the clinical value of screening, but this issue has not been settled. Initial data from two major long-term and ongoing studies of prostate cancer screening show approximately a 20-percent reduction in death from prostate cancer due to screening. Both studies are being performed on thousands of patients and will provide extensive data on screening and mortality between 2005 and 2008.

SCREENING AND ADVANCED PROSTATE CANCER

Men whose cancer was detected by screening are diagnosed earlier than other men and therefore are less likely to have disease that has spread beyond the prostate. This is particularly important because currently available treatments are much less effective for men with prostate cancer that has spread.

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Screening seems to have allowed cancers to be diagnosed at earlier stages. Since screening with the PSA test became common, metastatic prostate cancer accounts for a smaller percentage of all new cases of prostate cancer diagnosed (although there have been more cases diagnosed overall).

IS DETECTING PROSTATE CANCER EARLY ALWAYS IDEAL?

In the recent past a “normal” PSA level was considered from 0 to 4 nanograms per milliliter (ng/ml). Some doctors argue that lowering the cutoff point and further testing men with PSA levels of 2.5 ng/ml or more would help detect cancer earlier, especially in younger and African-American men. This might give patients a better chance of surviving prostate cancer.

Other doctors would like to lower the age at which screening begins or establish a “baseline” PSA value at an earlier age so a man’s PSA level may be monitored for change. They feel that screening at a younger age will detect a higher number of patients likely to be treated successfully.

THE IMPACT OF EARLY DETECTION

Not all prostate cancers progress quickly, and some will never cause health problems. Some doctors note that screening younger men and lowering the PSA levels that lead to a biopsy (a procedure in which a sample of tissue is removed and then examined under a microscope) may result in “over-diagnosis”—that is, the detection of cases of prostate cancer that were not likely to grow and spread for many years (if at all).

Opponents of screening men who show no symptoms of prostate cancer argue that with screening, doctors may diagnose cancer that would never hurt a man if it were not diagnosed. They note that this could lead to unnecessary treatment that could harm men’s sexual or reproductive health, and might even increase death rates.

A major problem is that scientists cannot determine with certainty which cancers will be harmful and which will not. Finding cancer early through screening allows doctors to inform patients about the possibilities and allows men with prostate cancer to make the best possible decisions.

Talking About Prostate Cancer Screening

Years ago when I was a youngster growing up in the 50s and early 60s, we never used the word breast. Obviously you didn't see mammograms on the evening news, and now they're being talked about daily. I think that we need to do that with prostate cancer: bring the topic out in the open, talk about screening, and face it head on.

— Bill

WHAT EACH MAN SHOULD CONSIDER

Early detection of prostate cancer is a complex issue for doctors and patients. If you are considering being screened for prostate cancer, ask your doctor to provide available data and information about situations like yours. Being informed will enable you to make educated decisions about screening, detection, and treatment.

In chapter 2 we explored various risk factors for prostate cancer, and throughout section II of this book we discuss tests that allow doctors to detect prostate cancer. As you learn about risk factors for prostate cancer and consider undergoing screening tests, it's important to keep in perspective your likely risk of developing prostate cancer and the possible impact on your life of being diagnosed with prostate cancer. Putting your risk of prostate cancer into context requires understanding three things:

- your risk of having or developing prostate cancer
- your risk of prostate cancer as compared to the other risks you face in your life
- the potential consequences for your health and life if you did develop prostate cancer

ASSESSING RISK

A man's risk of prostate cancer refers to his chances of having detectable prostate cancer by the end of a defined time interval. For example, an average 60-year-old man may be said to have a 14 percent chance of developing detectable prostate cancer within 19 years. In other words, among 100 60-year-old men who do not have prostate cancer, 14 will have prostate cancer diagnosed (either by screening tests or because they developed symptoms) during the next 19 years. This number is based on the "average" outcomes of many men. However, no individual man is exactly average. Based on risk factors discussed in chapter 2, doctors can estimate that some men may have a higher-than-average risk and others may have a lower risk. Even when these factors are considered, it is important to realize that these predictions are quite accurate in predicting how many men out of 1,000 will develop prostate cancer, but are not at all accurate in predicting the outcome of any single man. One way to help understand the difference between predictions for groups and individuals is to think of coin tosses. If you flip a coin 1,000 times, you can confidently predict that the number of heads will be very close to 500. On the other hand, if you toss the coin only once, it's impossible to accurately predict how it will land.

Your doctor can't say for certain whether you will have prostate cancer or not, but he or she can help evaluate your risk factors and advise you about your likely risk.

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COMPARATIVE RISK

Another factor to consider with screening is the probability of prostate cancer as compared to other risks in a man's life. In other words, if a man has severe heart disease and is not expected to live more than a couple of years because of it, his risk of death from prostate cancer is lower than his risk of death from heart disease. Therefore it is less necessary to assess his risk of prostate cancer. The issue of comparative risk becomes more difficult if a man has other illnesses but it is not clear that they are currently life threatening. In that situation, doctors can help evaluate the man's risk of prostate cancer and discuss his potential screening plan.

POTENTIAL CONSEQUENCES OF A PROSTATE CANCER DIAGNOSIS

As noted elsewhere in this chapter, the vast majority of men screened for prostate cancer are not found to have the disease (only about 3 percent of men screened are found to have prostate cancer). However, if men live long enough, they are likely to develop prostate cancer. One man in 6 will be diagnosed with prostate cancer during his lifetime, but only 1 in 33 will die from prostate cancer.

In many cases, prostate cancer grows slowly. Some men opt not to treat prostate cancer, especially if they are elderly and if treatment side effects are more likely to cause detriments to their health than the cancer itself. Younger men often want prostate cancer treated early when it can most easily be controlled. Screening is something for you and your doctor to decide about.

Early Detection Recommendations

The American Cancer Society, the American Urological Association, and the National Comprehensive Cancer Network believe that prostate cancer testing can save lives. The American Cancer Society and the American Urological Association recommend that health care professionals offer men 50 years or older who are at average risk of developing prostate cancer the option of annual testing for early detection of the disease. (The National Comprehensive Cancer Network recommends offering a baseline screening at age 40 and possibly again at age 45 before annual testing beginning at age 50). Testing for prostate cancer in men without symptoms can detect tumors at an earlier stage, allowing for earlier treatment and potentially more favorable results.

Most major medical organizations recommend that doctors discuss the benefits and potential risks of PSA screening, consider patient preferences, and individualize the decision to screen. Generally the most appropriate candidates are men over 50 or younger men at increased risk. Screening is not likely to benefit men with a life expectancy of less than 10 years.

American Cancer Society Recommendations for the Early Detection of Prostate Cancer

The American Cancer Society believes that health care professionals should offer the PSA blood test and digital rectal examination (DRE) yearly, beginning at age 50, to men who have at least a 10-year life expectancy. Men at high risk—such as African Americans and men who have a first-degree relative (father, brother, or son) diagnosed with prostate cancer at an early age (younger than 65)—should begin testing at age 45. Men at even higher risk (because they have several first-degree relatives who had prostate cancer at an early age) could begin testing at age 40. If the results of this initial test are less than 1 ng/ml, further testing might not be needed until age 45.

The American Cancer Society also recommends that men discuss with their doctors potential benefits, side effects, and questions regarding early prostate cancer detection and treatment so they can make informed decisions about testing. If you feel that you are at risk and would like to be tested for prostate cancer, work with a physician who will offer you screening.

If you elect to be tested, keep in mind the following:

- Digital rectal examination and PSA testing are most effective when used together to detect prostate cancer.
- A PSA of less than 4.0 ng/ml does not mean that you do not have prostate cancer, and a normal DRE does not mean that you do not have prostate cancer.
- An abnormal DRE or a high PSA level does not necessarily mean that you do have prostate cancer. Some elevations in PSA may be due to benign (not cancerous) conditions of the prostate. If you have a PSA result of 4.0 ng/ml or higher, your doctor will work to determine the cause of this elevated PSA level. (Some doctors use a cutoff point of 2.5 ng/ml.)

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