



Your Health Matters

Active Surveillance for Prostate Cancer

Did you know?

Prostate cancer is the most common cancer in men in the United States. It is also the second leading cause of cancer death in men. But many prostate cancers may grow very slowly, and may not need to be treated right away if it all.

In recent years it has become easier to diagnose prostate cancer in its early stages. But early diagnosis may not mean that you need immediate treatment. When you are diagnosed, your doctor will perform several tests to learn the volume, grade and stage of the cancer to determine how quickly your tumor is likely to grow. Depending on the test results, your doctor may offer “active surveillance” as a way to monitor your disease rather than treat it immediately.

What is active surveillance?

Active surveillance is a way to monitor “low risk” prostate cancer—cancer that is not an immediate risk to your health or well-being. Your doctor will decide if your cancer is low risk by looking at blood tests (prostate-specific antigen, or PSA), samples of the cancer cells (prostate needle biopsy), and images of your prostate gland (ultrasound).

You may want to consider active surveillance if you are concerned about possible side effects of prostate cancer treatment. These can include bladder problems (urinary incontinence or frequency), bowel problems and erectile dysfunction (impotence). These problems do not occur in all men, but they are a risk with all types of surgery, radiation and hormonal treatment.

If you choose active surveillance, you will visit your doctor for regular check ups. During these visits, you will undergo tests to find out if there have been any changes in your cancer. The tests usually include:

- a blood test to measure prostate-specific antigen (PSA) every 3 months
- a prostate ultrasound every 6 to 12 months
- a prostate biopsy every 1 to 2 years

If the tests show the cancer is growing or becoming more aggressive, your doctor may recommend that you have surgery, radiation therapy, or other treatment. But if the changes are small or non-existent, your doctor may advise that it is safe to continue active surveillance.

Making lifestyle changes such as improving your nutrition, reducing stress and getting more exercise can also be part of active surveillance. A study at UCSF showed that men on active surveillance who made lifestyle changes had lower PSA levels and lower rates of treatment than men who did not make these changes. You may choose to join diet and lifestyle studies at UCSF or support groups as part of your active surveillance.

Who can choose active surveillance?

The best candidates for active surveillance have:

- Low-risk biopsy results, including: a prostate biopsy Gleason score—a measure of how aggressive the cancer is—of 6 or less (i.e. no pattern 4 or 5); cancer in no more than one third of the total needle samples; and cancer in no more than 50 percent of any single needle sample. It is very important that the biopsy be done correctly; sampling enough of the prostate to be sure the cancer is not large and/or more aggressive. Therefore, 12 or more needle samples are taken during the prostate biopsy. If the initial biopsy was not extensive enough, another may be needed before deciding on active surveillance.
- A PSA at the time of diagnosis of 10 or less that does not change much over time.
- Ultrasound, physical examination (i.e. digital-rectal examination) or other test results that suggest the cancer has not spread outside the prostate gland.

However, there are no strict rules for who can choose active surveillance. You and your doctor can discuss whether you will be a good candidate for this option.

Is active surveillance right for you?

Active surveillance may not be the best choice for everyone with low-risk prostate cancer. Some men may not want to make regular visits for testing. Others are not comfortable with the idea of continuing to have cancer, even if it is low-risk.

They may prefer to have treatment as soon as possible. Often men choose active surveillance for a period of time and then decide to undergo treatment.

At UCSF, more than 600 men have chosen active surveillance to manage their prostate cancer. This is one of the largest groups of active surveillance in the world. About one in five of these men have received treatment, usually by three years after their diagnosis. Treatment results for these men appear, to date, to be similar to what would have been expected had they chosen treatment right after their original diagnosis. The most common reason for seeking treatment is a biopsy that shows the cancer is growing or becoming more aggressive in appearance. Changes in PSA or ultrasound results may also lead to treatment.

Your doctor is happy to discuss any questions you have about active surveillance. Together, you can decide whether this is a good option for you.

There are ongoing studies at UCSF that you may want to participate in. Patients who select active surveillance are often able to enroll in diet and lifestyle intervention studies, as well as studies that use new tests to predict if the cancer will grow and become aggressive or remain contained.

Terms to know:

Digital rectal exam (DRE): A screening procedure for prostate cancer where a doctor inserts a gloved, lubricated finger into the rectum to feel the size and shape of the prostate.

Gleason score: Based on how the biopsy cells look under a microscope, prostate cancers are given a Gleason score. This is a measure of how likely the cancer cells are to spread. The pathologist rates the two most common types of cancer cells in the biopsy on a scale of 1 to 5. These numbers are then added together for the Gleason score. The least aggressive cancers have a score of 2 and the most aggressive have a score of 10.

Grade: This term refers to how aggressive the cells in the tumor look. See the definition for Gleason score, Gleason score is also referred to as Gleason grade.

Prostate-specific antigen (PSA) test: A blood sample is taken to measure the amount of a protein called prostate-specific antigen in your blood. A PSA at diagnosis of 10 or less is best for active surveillance. An increase in your PSA level may mean that your cancer is growing, especially if the increase is rapid.

Prostate biopsy: Guided by a small ultrasound probe in the rectum, thin needles are passed through the rectum into the prostate to take small tissue samples. These samples are then examined under a microscope. A thorough prostate biopsy should include at least 12 tissue samples.

Stage: This term refers to the extent of the cancer, or whether the tumor is confined to the prostate.

Transrectal ultrasound (TRUS): This test uses ultrasound waves to obtain an image of the prostate gland. The ultrasound waves are produced through a small probe inserted in your rectum. The ultrasound helps your doctor know if the tumor starts spreading outside the prostate gland.

Volume: This term refers to how much cancer there is in the tumor.

Additional Information

- UCSF Your Health Matters: Nutrition & Prostate Cancer
http://urology.ucsf.edu/patientGuides/pdf/uroOnc/Nutrition_Prostate.pdf
 - American Cancer Society
<http://www.cancer.org>
 - National Cancer Institute
<http://www.cancer.gov>
1. Dall’Era MA, Konety BR, Cowan JE, Shinohara K, Stauf F, Cooperberg MR, Meng MV, Kane CJ, Perez N, Master VA and Carroll PR. (2008) Active surveillance for the management of prostate cancer in a contemporary cohort. *Cancer* 112:2664-70.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Citation&list_uids=18433013
 2. Dall’Era MA, Cooperberg MR, Chan JM, Davies BJ, Albertsen PC, Klotz LH, Warlick CA, Holmberg L, Bailey DE, Jr., Wallace ME, Kantoff PW and Carroll PR. (2008) Active surveillance for early-stage prostate cancer: review of the current literature. *Cancer* 112:1650-9.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Citation&list_uids=18306379

