Prostate Cancer Screening

Prostate cancer is the most common cancer in men in the US excluding skin cancer. Most people who have prostate cancer have no symptoms. There are many different varieties of prostate cancer. Many men have a very slow growing tumor which may never cause problems in that man's lifetime. Others can have a faster growing tumor which can lead to problems sooner. In an attempt to identify cancer in its earliest stages, screening has been developed.

At the present time, we can screen for prostate cancer by doing a rectal exam of the prostate and by doing a blood test called PSA (prostate specific antigen). PSA is a protein made by prostate tissue and is a normal component of the semen. Both normal and cancerous prostate tissue can make PSA. A low PSA indicates a low chance of having prostate cancer and a higher PSA indicates a higher chance of having prostate cancer. There is technically no normal PSA value. There are just different levels of risk for prostate cancer with different levels of PSA. Usually once a man reaches a 20-30% or greater chance of having prostate cancer by the PSA test we offer further investigation.

Risks of Screening

There are some risks associated with PSA screening for prostate cancer. There are risks from a prostate biopsy itself as explained below. Aside from that, there is also the risk that you may be undergoing an unnecessary procedure. The lifetime risk of developing prostate cancer is about 16% but the chance of dying from prostate cancer is about 3%. There is a concern that prostate cancer is being over diagnosed and over treated. As a result, some men may be harmed by undergoing unnecessary procedures.

Prostate Biopsy Information

There is only one way at the present time that prostate cancer can be diagnosed. This is by having an office procedure called a prostate biopsy. During the procedure, a smooth, lubricated ultrasound probe is passed into the rectum. This probe is slightly larger than a finger and no more uncomfortable than a rectal examination. The probe sends out harmless sound waves which are reflected back from the prostate tissue and computerized into an image on a television screen. By this technique the entire prostate gland is evaluated.

Tissue specimens are obtained during the same ultrasound procedure. Using the rectal probe as a guide, a local anesthetic, lidocaine, similar to what is used at the dentist, is given before the biopsies to minimize discomfort. A biopsy needle is then directed into the area where a sample will be taken. The needle is small and automatically driven so that each biopsy takes only a fraction of a second. We generally will take 10 to 12 biopsies during the procedure. The procedure takes about 10 minutes. Patients may leave immediately after the biopsy. You should be able to drive yourself to and from the biopsy and can usually resume most normal activities within a day. The results take 7-14 days to come back.

The risks of the procedure are bleeding, infection and failure to diagnose the prostate cancer. Usually bleeding is minor and is noted as some blood in the stool or urine. There is almost always some blood in the semen for 1-2 months which is expected and harmless. There is a 1% chance of significant rectal bleeding which presents shortly after the biopsy has been done. If you have a large amount of blood or clots in the stool you should notify the doctor or come back to the hospital. Usually with observation alone the bleeding will stop.

There is also a risk of infection in the bladder or prostate. We routinely give you an antibiotic to start taking prior to the procedure to help reduce this risk. Despite the antibiotic, there is still a 1-4% chance of getting an infection. It usually develops within the first few days of the biopsy and presents as fever, headache, chills, body aches. If this happens, you will usually be admitted to the hospital for a few days in order to receive an intravenous antibiotic.

Lastly, a prostate biopsy will not detect 100% of cancers that are in the prostate. The 12 samples are only showing us a small portion of what may be in the prostate. Because of this, a prostate cancer may be missed 20-25% of the time on the initial prostate biopsy. A large cancer is unlikely to be missed. If you have a negative prostate biopsy, we would continue to monitor you for signs of prostate cancer. We may recommend a repeat prostate biopsy if there any concerning changes, such as a significant rise in the PSA. The chance of missing prostate cancer with repeated prostate biopsies goes down with each subsequent biopsy.

Prostate Cancer Information

For some men that are diagnosed with prostate cancer, it can take many years to decades for the cancer to grow and become a problem. So, even if a prostate biopsy shows prostate cancer, treatment may be delayed for years and sometimes indefinitely for some select men with favorable characteristics. This option is called active surveillance. This involves deferring treatment and monitoring the prostate cancer with PSA tests and biopsies. We would then treat the cancer if there are signs over time that it is growing and changing.

However, there are some men that get diagnosed with more aggressive prostate cancer. For these men treatment in the form of surgery or radiation is usually offered. Finding the more aggressive types of prostate cancer is the main goal of prostate cancer screening.

Your Options

The options available to men with an elevated PSA are as follows:

- 1. Opting not to be screened at all.
- Some men feel that the harms from detection or treatment are greater than the harm of having an undiagnosed prostate cancer.
- 2. Opting to be screened and followed with a PSA test but deferring a prostate biopsy.
- Some men opt for this because they do not want further testing at present but would consider a prostate biopsy in the future if there were findings indicating a higher risk of prostate cancer.
- 3. Opting for a prostate biopsy.
- The prostate biopsy provides the most information. It is the only way to know whether you have prostate cancer or not. The prostate biopsy also provides information as to how aggressive each man's cancer may be which helps decide whether early intervention is warranted. If the prostate biopsy is negative, we would then generally recommend annual PSA testing. A repeat biopsy may be suggested if there are changes in the rectal exam or the PSA rises the future.

Let your urologist or primary care doctor know which of the above options you are interested in and a plan can be made for your situation.