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# Exam Coming Up? Here's How Doctors Evaluate Your Prostate

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The prostate gland plays a vital role in reproduction and is a walnut-sized organ that sits beneath the bladder. The urethra, the tube that ushers urine from the bladder out of the penis, also communicates with the prostate. In addition, the prostate gland has an opening to two seminal vesicles that sit atop the prostate.

This gland produces seminal fluid, the liquid part of ejaculation. Sperm created in the testis travels up the vas deferens and collects in the seminal vesicles. A complex nervous network stimulates the prostate; ultimately, the prostate contracts. After this happens, sperm enters the prostate, mixes with prosthetic fluid, and is forced out of the urethra during orgasm.

Located low in the male torso, the prostate gland is near the rectum. As a result, it is about a finger's length distance from the anus, making it readily available for a variety of noninvasive examination techniques.

## **Digital Rectal Examination (DRE)**

Men have dreaded the digital rectal exam for decades. Nevertheless, it has been part of the male routine physical examination since the early 20th century. Clinicians routinely use this procedure to assess various organ functions and conditions, not just the prostate.

#### The Procedure

The patient should supply a urine sample for analysis before the examination. Prostate manipulation can express substances and bacteria into the urine contaminating the urine analysis (UA).

The clinician washes their hands and puts on an unsterile glove. The index finger is lubricated, usually with a jelly-like substance. After visually inspecting the perianal area, they gently and slowly insert the lubricated finger into the rectum.

Along the way to reaching the prostate, the clinician feels the walls of the rectum for irregularities. Once reaching the prostate, they will assess its size, symmetry, and tenderness. The clinician can only reach the bottom back side of the gland; however, it gives some information about the gland as a whole.

If the patient bears down when the examining finger is being inserted, like having a bowel movement, this action is called Valsalva. In that case, the anus opens more, and the examination may be less uncomfortable. Upon exiting, the examiner collects a small amount of stool on the glove for testing occult blood. He then performs a Fecal Occult Blood Test (FOBT), commonly known as a guaiac smear or Hemoccult test.

#### The Problem With DRE

Many studies suggest that DRE has not demonstrated a significant increase in prostate cancer detection. In addition, rigorous examination of an infected prostate can lead to systemic complications. However, while the test may be uncomfortable, it is not painful unless inflamed, infected, or otherwise diseased tissues along the way are sore, hemorrhoids, for example.

Consequently, due to the DRE's ineffective ability to detect cancer, it is not recommended as a cancer screening tool in men with less than a ten-year life expectancy. This recommendation is because, in older men, prostate cancer seems to grow much slower than when young men develop prostate cancer. However, that does not mean that a medical professional should not perform a DRE. There are all of the other things it checks for.

## **Prostate Specific Antigen Test (PSA)**

A PSA is a simple blood test usually performed at the same time as a yearly blood work screening. The PSA is a molecule produced by the lining of the prostate gland that elevates when cancer is present. The increased metabolic rate of growing malignancy stimulates PSA excretion.

The PSA is routinely a part of the two-part screening for prostate cancer in men along with the DRE. There are specific guidelines as to when routine PSAs should begin by age and risk.

- Men at higher risk (of African descent or family history of prostate cancer) should begin routine PSA screening at age 45.
- Men with "average risk" start at age 50.
- Men at "low risk" and a PSA less than 2 ng/ml at age 40 can be tested every two years.
- Men with a PSA of less than 2 ng/ml at age 60 can be tested every two years.

The PSA is not 100% effective in diagnosing prostate cancer, as several conditions can also be responsible for elevating the PSE, such as Prostatitis (infection) and certain other cancers. Seventy-five percent of men with an elevated PSA will not have prostate cancer. Conversely, one in seven men with prostate cancer will have a normal PSA.

### Ultrasound of the Prostate

An ultrasound of the prostate is also called a transrectal ultrasound. Ultrasound is a fascinating imaging technique using the frequency of a sound wave. Sound waves penetrate tissue, the rate at which a computer records. The sound waves move more slowly through denser tissue.

The technician inserts a small probe about the size of the finger in the DRE. This probe emits sound waves close to the prostate gland. The recorded images can show the size of the prostate gland and irregularities on the surface and within the gland. Ultrasound can also see blood vessels. A growing malignancy requires a good blood supply.

## **Magnetic Resonance Imaging (MRI)**

MRI of the prostate is performed for various reasons when indicated by less invasive tests. MRI is used to diagnose prostate cancer and check for cancer spread. MRI also shows congenital issues, prostatitis, and benign enlarged hypertrophy (BPH).

Instead of a finger-sized rigid probe, some facilities use an endorectal coil. It is a thin wire covered with a balloon made of latex. Patients are typically screened for latex allergy beforehand.

## An Ounce of Prevention or a Pound of Cure

The prostate gland is an essential organ in men. It can be a source of great joy in its physiologic function in reproduction or cause pain and suffering from infection or cancer. And it can simply enlarge and cause problems with urinating.

Routine evaluation of the prostate gland can maximize outcomes by early detection. But, first, seek medical counsel for any changes you may notice. Prostate 911 is a natural supplement that is also able to provide benefits to this gland. Then, when the exam comes up, you already know exactly how doctors will evaluate your prostate.

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