

Understanding PSA

The prostate produces a protein called prostate specific antigen (PSA). The PSA test measures the level of PSA in the blood. Under normal conditions, men have low levels of PSA in their blood. In certain diseased states, more PSA enter the blood stream due to disruption of the normal structure of the prostate gland. This can lead to a high PSA value which may indicate the presence of disease in the prostate.

The prostate enlarges as a man gets older. The PSA level may rise as the prostate enlarges. Benign prostate enlargement, often referred to as BPH (Benign Prostate Hyperplasia), is a common cause of a high PSA level. This is a non-cancerous condition which can be associated with urinary symptoms (e.g. decreased urinary stream, feeling of incomplete voiding, straining to void, urinary frequency, etc.).

Other benign conditions that can lead to elevated PSA include prostatitis (inflammation of the prostate) and urinary tract infections. If the blood is drawn a short while after ejaculation, or bicycle riding, the PSA may also be quite high. A high PSA may not necessarily mean that cancer is present.

The risk factors for prostate cancer include age, family history, race and possibly diet. Men with a first degree relative with prostate cancer have a greater chance of developing prostate cancer. African Americans have the highest rate of prostate cancer, while Asians have the lowest. A diet rich in animal fat reportedly increases a man's risk of prostate cancer.

Some doctors recommend yearly screening for men 50 or older. For men with a family history of prostate cancer, and African Americans, screening is often recommended starting at the age of 40 or 45. A man's life expectancy and overall health are generally the main factors considered in recommending screening for prostate cancer.

There are many non-cancerous conditions which can cause the PSA to be abnormal as discussed above. If a man's PSA is increasing, or a lump is palpated on rectal exam, additional testing is often recommended. This may involve urologic consultation for repeat examination, ultrasound examination and biopsy of the prostate.

Ultrasound examination is done by looking for possible abnormal areas in the prostate. The biopsy is done by sampling the different regions of the prostate using a needle. The tissue is then sent to a pathologist to determine whether or not cancer is present. Ultrasound alone is not sufficient to detect cancer.

For more information on PSA, please visit our website, urology.urmc.edu or talk to your physician about a referral. Please call (585) 275-2838 for additional information, or to make an appointment.