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Initial PSA Measurement Could Help Guide Further Prostate Cancer Testing

In a large European study, researchers looked at using first-time prostate-specific antigen (PSA) levels as a way to guide future screening for prostate cancer. PSA is a protein found in higher-than-normal levels in men with prostate cancer and some noncancerous prostate conditions. Men with higher-than-normal PSA levels may be recommended for a biopsy (removal of a small piece of tissue for examination under a microscope) to look for cancer.

This study showed that recommending a biopsy for men with a first-time PSA level of 3.0 nanograms (ng)/millileter (ml) and above is appropriate because few men with a lower PSA level developed prostate cancer and died from the disease. Of the 15,758 men in the study with a PSA level below 3.0 ng/ml, 6% developed prostate cancer. About 1% of those men had an aggressive cancer (which grows and spreads quickly) and less than half a percent died from the disease.

Researchers found that, overall, for men with PSA levels less than 3.0 ng/ml, the risk of developing prostate cancer and dying from the disease is lower than that for men with a PSA level over 3.0 ng/ml. However, men with first-time levels between 1.0 ng/ml and 2.9 ng/ml still have a higher risk of developing prostate cancer or dying form the disease than men with first-time PSA levels less than 1 ng/ml. In this study, about 45% of the men had a first-time PSA level of less than 1.0 ng/ml. Researchers note that the low risk of prostate cancer for these men means that they may need PSA testing less often.

What this means for patients

?Our results strengthen the use of PSA to estimate the risk of prostate cancer and determine further screening. This means that we can possibly avoid unnecessary testing, diagnosis, and treatment of less-aggressive disease, with fewer side effects, by focusing biopsies and other follow-up tests on men with higher initial PSA levels,? said lead author Meelan Bul, MD, a PhD student in the Department of Urology at Erasmus University Medical Center in Rotterdam, The Netherlands. ?However, among men with a low risk of prostate cancer, we still found some aggressive prostate cancers and we need to improve methods of finding aggressive disease.? Use of PSA screening is controversial because while it can be useful for detecting early prostate cancer, it also finds conditions that are not cancer, and misses some prostate cancers. It's important to talk with your doctor about PSA screening and what the results of screening might mean.

Questions to ask your doctor

- What is my risk of prostate cancer?
- Do you recommend PSA screening for me?
- Who will explain the results?
- If the results suggest cancer, what are the next steps? Will I need additional tests?

For More Information

Guide to Prostate Cancer [1]

Cancer Screening [2]

Links:
[1] http://dev-cancernet.asco.org/node/19562
[2] http://dev-cancernet.asco.org/node/24972