

Prostate size growth not necessarily a predictor of development of cancer

New Mayo Clinic research studied the association between prostate-specific antigen (PSA) levels and prostate size and found that routine annual evaluation of prostate growth is not necessarily a predictor for the development of prostate cancer. However the study suggests that if a man's PSA level is rising quickly, a prostate biopsy is reasonable to determine if he has prostate cancer. These findings are being presented this week at the North Central Section of the American Urological Association (www.ncsaua.org/) in Scottsdale, Arizona.

These Mayo Clinic study findings were based on data in the Olmsted County Study of Urinary Health Status among Men, a large cohort study of men living in Olmsted County, Minnesota. Researchers randomly selected 616 men between the ages of 40 and 79 who did not have prostate disease. Patients participate in examinations every two years for 17 years, which included PSA and prostate volume measurements using ultrasound, to determine changes in prostate disease.

"One of the major advantages of this large cohort study is that the men have participated in this study for over 17 years," says Rodney Breau, M.D., a Mayo Clinic urologic oncology fellow who led the study. "Because of this, we have the ability to look at long-term relationships between prostate growth, change in PSA and development of prostate cancer."

Faster rise is PSA levels

Of the 616 men, 58 (9.4%) developed prostate cancer. Men who were diagnosed with prostate cancer had a faster rise in PSA levels (6%/year) compared to men who were not diagnosed with cancer (3.3%/year). However, the increase in prostate size was similar between these two groups (median change of 2.2%/year).

PSA is a substance produced in the prostate gland. Normally, a small amount of PSA enters the bloodstream. A higher amount of PSA or an abrupt rise in PSA levels can indicate a problem, possibly prostate cancer.

"The question we're trying to answer is this: if we see a man with a rising PSA level, could this change in PSA be explained by a proportional increase in prostate size?" says Dr. Breau. "Our data indicate that men with or without prostate cancer have similar rates of prostate growth. If a man's PSA is quickly rising, he likely deserves a prostate biopsy to determine if he has prostate cancer. Assessment of change in prostate size should not influence the decision to biopsy."

Source: Mayo Clinic