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CHRONIC DISEASES

Screening for Prostate Cancer USPSTF Recommendation Statement

OUR CLINICAL ADVISOR SUGGESTS ASKING 55- TO 69-YEAR-OLDS
THIS QUESTION TO HELP DETERMINE WHETHER THEY WANT TO BE
SCREENED

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Summary of Recommendation

The purpose of this review was to update the 2012 U.S. Preventive Services Task Force (USPSTF) recommendation on prostate cancer screening. In the United States, the risk of being diagnosed with prostate cancer is approximately 12%, and the risk of dying from prostate cancer is 2.5%. The prostate cancer mortality rate has been decreasing since 2003. Risk factors for prostate cancer are older age, African American race, and a family history of prostate cancer.

Screening options for prostate cancer include digital rectal exam, prostate-specific antigen (PSA), and prebiopsy risk calculator. The digital rectal exam is no longer recommended due to the lack of benefit. PSA is most commonly used but has some limitations. PSA levels can be increased in benign prostatic hyperplasia and prostatitis, and there is a risk for false positives. Although the studies are promising, insufficient evidence exists to recommend prebiopsy risk calculators.

As far as treatment for prostate cancer, men may decide whether to have surgical removal of the prostate gland, receive radiation therapy (ie, external-beam radiation, proton beam therapy, or brachytherapy) or to receive repeated PSA tests and a prostate biopsy (known as “active surveillance”). None of the treatment options is without harm. For example, in the European Randomized Study of Screening for Prostate Cancer (ERSPC), 1000 men were screened, and of these, 75 were treated. Of the men treated, 87% experienced erectile dysfunction or urinary incontinence related to treatment.

USPSTF provided recommendations for men aged 55 to 69 years and those aged >70 years. For patients ages 55 to 69 years, the decision to be screened for prostate cancer should be an individual one. For men <55 years or those aged >70 years, screening is not recommended. From the studies reviewed, the harms of false-positive results, over diagnosis, and treatment-related adverse effects outweigh benefits of earlier detection and prevention of death from prostate cancer.

As noted, African American men and men with a family history of prostate cancer have an increased risk of developing prostate cancer. USPSTF did not include specific recommendations for men with risk factors. For African American men, because there is a higher risk of diagnosis and death from prostate cancer, physicians should include this information when discussing the risks and benefits of screening. For men with a family history of prostate cancer, men with a first-degree relative with metastatic prostate cancer are more likely to benefit from screening. If >2 men in the family have prostate cancer, it may be an inheritable form. This type accounts for <10% of all cases; reviewing family history with the patient will help determine risk.

Three large randomized controlled trials were evaluated to determine USPSTF recommendations, which include the U.S.-based Prostate, Lung, Colorectal, and Ovarian (PLCO) Cancer Screening Trial, the ERSPC, and the Cluster Randomized Trial of PSA Testing for Prostate Cancer (CAP). In the PLCO trial, men were randomized to receive annual PSA screening or usual care; both groups had a high rate of screenings (ie 5 vs 3 during screening phase). Results showed that more men in the intervention group were



diagnosed with prostate cancer. However, mortality rates did not differ between the groups. In the ERSPC study, the number needed to screen to prevent 1 prostate-cancer related death was 781. One in six men had at least 1 false-positive result. In the CAP trial, no significant difference was seen in prostate cancer mortality rate between the control group and the group that received a PSA test. Most of the participants in all 3 studies were between ages 55 to 69 years. Time between screenings and PSA threshold levels also varied among the trials.

Recommendations from other societies vary, but all suggest not starting PSA screening earlier than age 50 years. The American Academy of Family Physicians and Canadian Task Force on Preventive Health Care recommend against PSA screenings. The American Urological Association and American College of Physicians recommend discussing the benefits and risks of PSA screening with men ages 55 to 69 years who have a life expectancy of >10 years. The American Urological Association also recommends screenings no more often than every 2 years. The American Cancer Society stresses the importance of shared decision-making. Discussion should start with African American men at age 50 years and men with a family history of prostate cancer at age 60 years.

USPSTF also mentions several research gaps. Studies comparing the different screening strategies would be helpful in fully understanding benefits and harms. Development and validation of long-term follow-up screening and diagnostic tools would be beneficial, especially for patients with high PSA levels. Specific recommendations for screening and treatment of African American men and men with a family history of prostate cancer should be a top priority. When prostate cancer is treated, there are often lifelong side effects, and thus improvements are needed for prostate cancer treatment. Lastly, studies should be conducted to better understand patients' motivations for screening and how this affects assessment of benefit versus harm.

When speaking with your male patients aged 55 to 69 years about prostate cancer screening, a thorough review of the screening process, chance of false positives, and treatment options should be included. It is not recommended for men aged >70 years to receive a prostate cancer screening. African American men and men with a family history of prostate cancer may benefit more from a prostate cancer screening, but there are no specific differences in recommendations.

As noted in the item we posted earlier this year, when discussing prostate cancer screening with patients, point out the spectrum that most people fall on. Some can't sleep at night unless they've had every possible test, and some refuse to take a cholesterol drug because they hate medical intervention. Ask patients to think about where they fall: Are they in favor of more data or are they concerned more about overdiagnosis? It helps them get a better frame of reference as to what kind of decision maker they are and whether they want the screening.

ABOUT THE AUTHORS

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CITATION

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