

## Antibiotics Appear to Have No Effect on PSA Levels

BY ROBERT FINN

FROM THE ANNUAL MEETING OF THE AMERICAN UROLOGICAL ASSOCIATION

SAN FRANCISCO — Some physicians prescribe antibiotics to men with elevated prostate specific antigen to differentiate those who have infection or inflammation from those who have cancer, but a randomized controlled trial shows no

arm and 26 patients in the observation arm ended up having biopsies. The cancer detection rate was 53% in the ciprofloxacin arm and 42% in the observation arm, a difference with no statistical significance, said Dr. Bhavsar of the Medical University of South Carolina, Charleston.

The investigation included asymptomatic men with PSAs between 4.0 and 20.0 ng/mL. Patients were excluded if they had used 5-alpha-reductase inhibitors, if they had undergone prior prostate surgery, had a prior diagnosis of prostate cancer, had used androgen ablatives, had evidence of prostatitis, or if they were allergic to fluoroquinolones.

"There's a natural PSA variation in men, and the PSA may increase or decrease spontaneously with or without the use of antibiotics," Dr. Bhavsar said.

Some physicians may argue that it still makes sense to use antibiotics in these men because of the small risk of adverse events, but Dr. Bhavsar noted that unnecessary antibiotics add cost and may lead to the development of resistant organisms. In addition, there are rare adverse events, such as tendon rupture, associated with long-term antibiotic use.

Dr. Bhavsar said that none of the men in either of his groups experienced dramatic decreases in PSA levels. ■

**VITALS** **Major Finding:** Asymptomatic patients with elevated PSAs who were given 6 weeks of ciprofloxacin saw mean PSA levels decline 11%, compared with an increase of 4% in patients in a control group. The difference was not statistically significant.

**Data Source:** Randomized controlled trial of 120 men.

**Disclosures:** The investigators stated that they had no conflicts and that the study received no specific funding.

significant change in mean PSA levels between 60 asymptomatic men given a 6-week regimen of a fluoroquinolone and another 60 men assigned to observation.

Those who took 500 mg of ciprofloxacin twice daily for 6 weeks experienced an 11% decline in mean PSA values, compared with a 4% increase in PSA values among men in the observation group.

The difference was neither statistical nor clinically significant, Dr. Robin R. Bhavsar reported.

Thirty patients in the ciprofloxacin

## Sexual Function May Improve With Exercise in Healthy Men

BY ROBERT FINN

FROM THE ANNUAL MEETING OF THE AMERICAN UROLOGICAL ASSOCIATION

SAN FRANCISCO — Higher levels of exercise are associated with lower levels of sexual dysfunction, according to a study of 178 healthy men.

Men who reported exercise of at least 9 metabolic equivalents (METs) per week were 65% less likely to report sexual dysfunction. Brisk walking for 30 minutes a day for 4 days per week is equivalent to about 9 METs, according to Dr. Erin R. McNamara of Duke University Medical Center, Durham, N.C., who presented the results of her study at the meeting.

"If men won't exercise for the cardiovascular benefits, maybe they'll exercise to have better sex," Dr. McNamara said at a news briefing.

The men in the study were all enrolled in a prospective case-control study at the Durham Veterans Affairs Medical Center. Their mean age was 62 years; mean body mass index was 30.7 kg/m<sup>2</sup>.

The sexual function survey consisted of six questions, including ability to have an erection, quality and frequency of erections, and overall sexual ability. The investigators converted scores on the survey to a 0-100 scale.

The men also were asked to assess their duration, intensity, and frequency of exercise. The investigators converted these estimates to MET hours per week. They classified men reporting fewer



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**Men with moderate or high levels of physical activity were 65% less likely to have sexual dysfunction.**

than 3 MET hours per week as sedentary (53% of the sample), 3-8 MET hours as active (14%), 9-17 MET hours as moderately active (9%), and 18 or more MET hours as highly active (24%).

Mean sexual function scores were 42 for sedentary men, 50 for active men, 72 for moderately active men, and 70 for highly active men. The trend was statistically significant.

In a multivariate analysis controlling for age, race, BMI, and other factors, men reporting moderate or high levels of physical activity were 65% less likely to have sexual dysfunction than sedentary men. ■

## Prostate Cancer Risk Increased With High Calcium Intake

BY HEIDI SPLETE

FROM THE JOURNAL CANCER RESEARCH

Dietary calcium was associated with significantly increased risk of prostate cancer in Chinese men with below-average body mass index, according to an analysis of a large data set.

Researchers found that, among subjects with BMI below the median 22.9 kg/m<sup>2</sup>, the risk of prostate cancer was twice as high for those in the highest quartile of calcium intake, compared with those in the lowest quartile.

Data from previous studies have suggested a link between calcium and prostate cancer, but these studies have not been able to separate dairy products from calcium, said Lesley M. Butler, Ph.D., of Colorado State University in Fort Collins, and colleagues.

To more accurately assess the link between dietary calcium and prostate cancer, the researchers focused on a population of Chinese men whose dairy intake was relatively low. In general, Asian diets contain few dairy products, compared with Western diets, the researchers noted. Instead, most of the calcium in Asian diets comes from nondairy sources such as broccoli, kale, bok choy, and soy prod-

ucts. The researchers reviewed data from the Singapore Chinese Health Study, focusing on 27,293 men who did not have cancer when they entered the study between April 1993 and December 1998 (Cancer Res. June 2010 [doi: 10.1158/0008-5472.CAN-09-4544]).

Overall, dietary calcium was associated with a nonsignificant 25% increase in prostate cancer risk for the highest quartile of calcium intake (median of 659 mg/day) vs. the lowest quartile (median of 211 mg/day).

Median daily intake of dairy products in the study population was 19.3 g. The greatest contributions of different food sources to daily calcium intake were vegetables (19.3%), dairy (17.3%), grain products (14.7%), soy products (11.8%), fruit (7.3%), and fish (6.2%). The variety of food sources suggest that the link between prostate cancer risk and calcium intake is not likely to be related to any particular food group, the researchers noted.

Neither age nor physical activity had an effect on the association between calcium and cancer, the researchers wrote.

"Our study is the first to report a positive association between calcium and prostate cancer risk at such a low calcium

level," the researchers said. Previous studies have shown that calcium is absorbed more efficiently in the Chinese population, compared with the white population, and among thinner people compared with heavier people, which is why a study of relatively thin Chinese men

might be more likely to reveal a cancer/calcium connection than a study of heavier white men, the researchers wrote.

The study was supported by a grant from the National Cancer Institute. Dr. Butler stated that she had no financial conflicts to disclose. ■

### Over 1,000 mg May Be Too Much

MY TAKE **T**hese findings are interesting, but I don't think there is a direct message for physicians who counsel men at this time.

Previous studies had indicated that high intakes of calcium over 1,000-1,500 mg/day may increase risk. Since there is no established benefit for men at such high intakes, then I think it makes sense for men to not go much beyond the 1000-mg/day range until further studies have been done. However, too low intakes of calcium less than 700 mg/day may increase risk of some conditions, such as hyperten-



sion and colorectal cancer. Thus, it is reasonable for men to be in the range of 700-1,000 mg/day, but prudent not to go too much lower.

These results need to be confirmed in other studies where calcium intake is relatively low and there are not many dairy products. Also, since many men take calcium supplements, that might be an informative group to study.

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