Metabolic Syndrome Disorders, Diet May Boost Prostate Cancer Risk

New studies highlight impact of certain conditions on prostate cancer severity, role diet may play in etiology

Orlando, FL, May 20, 2014 — Three new studies featuring the impact of dietary and lifestyle factors on prostate cancer will be presented during the 109th Annual Scientific Meeting of the American Urological Association (AUA). The research will be highlighted by study authors during a special press conference at the Orange County Convention Center in Orlando, FL on May 20, 2014 at 9:00 a.m. ET.

With data from prior studies demonstrating how certain metabolic disorders – including obesity, high blood pressure and high cholesterol – can impact the development and progression of prostate cancer, men at risk for or diagnosed with prostate cancer are often advised to make adjustments or changes to their diet and lifestyle. Although the impact of these changes has not been well documented, the accumulated scientific evidence concerning the associations between them and prostate cancer risk suggests there are modifiable factors a man can change to decrease the risks associated with this common disease.

Study Details

Carbohydrate Intake, Glycemic Index and Prostate Cancer Risk (#PD31-11): A diet high in carbohydrates and lower in protein and fat may decrease prostate cancer risk in some men, according to new data from researchers at Duke University and Durham VA Medical Center. Using data from an ongoing Veterans Administration (VA) study of Caucasian and African American men (156 with biopsy-confirmed prostate cancer and 274 without), researchers reviewed self-reported responses to the Harvard food frequency questionnaire, adjusting for age, race, body mass index and caloric intake. In both Caucasian and African American men, higher complex carbohydrate (i.e. fiber, whole grains) intake was associated with a reduced risk of prostate cancer. These early data also suggest diets rich in higher glycemic index foods may increase prostate cancer risk in African American men.

Dairy Intake and Prostate Cancer Risk: Results from the California Collaborative Prostate Cancer Study (#PD31-06): New research from the University of Southern California, the Harvard School of Public Health, the Cancer Prevention Institute and the Stanford Cancer Institute shows higher calcium levels relating to milk consumption may play a role in increasing a man’s risk of advanced prostate cancer. Researchers from these institutions analyzed data from the California Collaborative Prostate Cancer study, a multi-ethnic, population-based, case control study, and examined patients’ intake of total dairy, milk, yogurt, ice cream and cheese and its relationship to prostate cancer risk. Milk consumption was associated with an increased risk of advanced prostate cancer, not localized disease, while yogurt, ice cream and cheese consumption were not associated with either advanced or localized cancer. Analyses also demonstrated, among men with an overall low calcium intake (<712.5 grams/day), higher intake of dairy was associated with an increase in risk compared to men with an overall calcium intake of >712 grams/day.

Metabolic Syndrome Components and Prostate Cancer Risk: Results from the REDUCE Study (#PD31-01): Using data from the Reduction by Dutasteride of Prostate Cancer Events (REDUCE) study, researchers from Duke University Medical Center, Washington University School of Medicine and the Arthur Smith Institute for Urology in New York examined the impact of multiple metabolic syndrome component conditions (such as obesity, high blood pressure, elevated fasting glucose, etc.) on prostate cancer risk. A retrospective analysis of 6,426 men (3,058 with prostate cancer) was conducted, with results adjusted for age, race, geographic region, prostate-specific antigen (PSA) level, prostate volume and digital rectal exam findings. Findings suggested 2,171 men had one metabolic syndrome component condition, 724 had two and 163 had three or four (of these men, 1,447 were diagnosed with prostate cancer during the study).
Data showed the presence of two or more metabolic syndrome component conditions was associated with an increased risk of high-grade disease, with statistical significance in men with three to four conditions. The presence of a single condition was not associated with an increased risk of low-grade or high-grade cancer.

“These studies provide interesting observations into how metabolic conditions, which can be a result of diet and lifestyle, may impact the risk of being diagnosed with prostate cancer,” said Scott Eggener, MD, session moderator and associate professor of surgery-urologic oncology, University of Chicago. “Even though more research is clearly needed in these areas, these data clearly demonstrate maintaining a healthy lifestyle may be a good first line of defense against being diagnosed with a life-threatening prostate cancer.”

NOTE TO REPORTERS: Experts are available to discuss this study outside normal briefing times. To arrange an interview with an expert, please contact the AUA Communications Office at 410-689-3932 or e-mail cfrey@AUAnet.org.

About the American Urological Association: The 109th Annual Meeting of the American Urological Association takes place May 16 – 21 at the Orange County Convection Center in Orlando, FL.

Founded in 1902 and headquartered near Baltimore, Maryland, the American Urological Association is a leading advocate for the specialty of urology, and has more than 20,000 members throughout the world. The AUA is a premier urologic association, providing invaluable support to the urologic community as it pursues its mission of fostering the highest standards of urologic care through education, research and the formulation of health policy.

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