FAMILIAL PROSTATE CANCER:
META-ANALYSIS OF RISK AND SURVEY OF SCREENING BEHAVIOR

Two recently published studies about familial prostate cancer report information relevant to clinicians counseling their patients about early detection of prostate cancer.

The first is a meta-analysis of the risk associated with having a family history of prostate cancer, published in Cancer (2003; 97:1894–1903). Researchers from New York University and Maastricht University in the Netherlands analyzed data from 33 previous epidemiologic studies that, in aggregate, included more than 200,000 patients.

Maurice Zeegers, PhD, an assistant professor of epidemiology at Maastricht University, and colleagues reported that, relative to men with no family history, men with a first-degree relative affected by prostate cancer are more than two-fold as likely to develop the disease (risk ratio = 2.53). An affected brother had more impact than a father with prostate cancer; risk ratios were 3.37 and 2.17 for men with affected brothers or fathers, respectively. The risk ratio for men with affected second-degree relatives was somewhat lower (1.68), but the increase relative to men with no family history remained statistically significant.

The risk ratio for men who had two or more first-degree relatives with prostate cancer (5.08) was significantly higher than for men with only one first-degree relative affected (2.57). A first-degree relative diagnosed before age 65 increased risk more than a first-degree relative who was older at the time of diagnosis; risk ratios were 2.47 and 1.72, respectively.

The authors noted that the increased risk associated with a family history of prostate cancer may involve both inherited cancer susceptibility genes and shared environmental risks among family members. “Nonetheless,” they wrote, “physicians and genetic counselors can use this information about the risks of prostate cancer associated with positive family history to counsel men who are currently unaffected by the disease.”

The second study, published in The Journal of Urology (2003;169:1715–1719), examined prostate cancer knowledge and screening behavior in 138 brothers and sons of prostate cancer patients between the ages of 40 and 70. Investigators at the University of California-Los Angeles found that although 75% of the men knew that having a father or brother with the
disease increased their risk of getting it, only 62% had been screened for prostate cancer with the prostate-specific antigen (PSA) blood test and a digital rectal examination (DRE) in the past two years. The numbers highlight a “disconnect” between what men know about their health, and what they do to protect it, said study coauthor Mark S. Litwin, MD, MPH, a professor of urology and public health at UCLA. It also points to a challenge for the public health community. “We’ve done a good job imparting knowledge,” he said, “but we haven’t done as good a job of getting men to act on that knowledge.”

When the researchers examined factors that influenced whether men got screened, one stood out—the influence of their doctors. Men who discussed prostate cancer screening with their doctors were 18 times more likely to get a PSA blood test and a DRE than men who did not talk to their doctors about screening.

Because all these men were at higher than average risk for prostate cancer, it seemed surprising that 20% reported they did not recall their doctor discussing prostate cancer screening. The authors propose two possible reasons. Some of the doctors may be unaware of a patient’s family history of prostate cancer. Another likely reason is the controversy within the medical community over prostate cancer screening.

The American Cancer Society (ACS) recommends that men at average risk be offered testing beginning at age 50, if they have a life expectancy of at least 10 years, and that men at increased risk for prostate cancer, such as African Americans and those with a history of the disease in a father or brother at a young age, should begin testing with both the PSA blood test and the digital rectal examination at age 45, or even younger if they have multiple relatives with the disease. The guidelines also recommend that all men should be advised of the potential benefits and risks of early detection and treatment of prostate cancer.

“A significant number of men who have a family history don’t know that means they’re at markedly increased risk,” said Durado Brooks, MD, MPH, director of prostate and colorectal cancer for the ACS. “But even when men do understand their risk, they may not be taking appropriate measures to prevent prostate cancer or detect it early.”

“We feel providers should be talking with all their patients about benefits and limitations, and in particular, they need to talk with patients at increased risk and let them know they stand a greater chance of having a benefit from screening,” Brooks said.

Litwin agreed. “If there’s any consensus, it’s that men who are at high risk ought to seriously consider being screened. Primary care physicians and prostate cancer specialists need to be sure and counsel their prostate cancer patients to talk to their own brothers and sons,” he said.

NEW DATA ON COMBINED HORMONE REPLACEMENT THERAPY AND BREAST CANCER

Two articles in the June 25 issue of JAMA (2003; 289:3243–3253) provide additional information on combined hormone replacement therapy (CHRT) as a breast cancer risk factor.

In a new analysis of data from the Women’s Health Initiative (WHI), a randomized, controlled trial comparing the effects of combination hormone therapy (estrogen plus progestin) with placebo, Rowan Chlebowski, MD, MPH and colleagues report that not only did women who took CHRT have a 24% greater incidence of breast cancer, but their cancers were harder to detect by mammography and were found at a more advanced stage. In addition, breast cancer risk rises within five years of starting CHRT—much sooner than previous observational epidemiologic studies had suggested.

More than 16,000 postmenopausal women ages 50 to 79 took part in the WHI trial of CHRT versus placebo, which after a mean follow-up interval of 5.2 years, was stopped ahead of schedule in 2002 when researchers