Lipid Levels, Prostate Disease Linked

BY DIANA MAHONEY

New England Bureau

BOSTON — Among men with prostate cancer, those with low plasma cholesterol are significantly less likely to develop more aggressive forms of the disease, compared with those who have higher cholesterol levels, Elizabeth A. Platz, Sc.D., reported at the annual international conference of the American Association for Cancer Research.

In a previous study, Dr. Platz of Johns Hopkins University in Baltimore and her colleagues showed that men who use statin drugs have a significantly reduced risk of developing advanced prostate cancer, suggesting a possible link between cholesterol status and disease progress. Because prostate cancer cells exhibit cholesterol dysregulation and because cholesterol affects multiple factors that could influence carcinogenesis, including sex steroid hormone production and cell-signaling pathways, the investigators narrowed their focus to cholesterol levels specifically for the current investigation, according to Dr. Platz.

To determine whether lower plasma cholesterol is associated with a lower risk of prostate cancer overall, as well as by stage and grade, the investigators compared blood cholesterol levels from nearly 1,400 men enrolled in Harvard University's Health Professionals Follow-up Study who provided a blood sample between 1993 and 1995. The study population included 698 men with incident prostate cancer diagnosed after the blood draw through January 2000, and 698 prostate cancer—free men who were individually matched based on age and other factors.

The mean plasma cholesterol levels were similar in the prostate cancer patients and the controls, "suggesting that cholesterol was not involved in the initial development of prostate cancer," Dr. Platz said.

But logistic regression analysis showed that prostate cancer patients with cholesterol levels in the lowest quartile, compared with those in the highest quartile, had a significantly reduced risk of developing more advanced disease. "The risk of having high-grade disease [Gleason score of 7 or higher] was reduced by nearly 40% among men in the lowest cholesterol quartile, and the risk of having advanced disease [tumor stage IIIB or worse] was reduced by 50%," Dr. Platz reported.

After excluding men who had ever used cholesterol-lowering drugs, the risk of developing high-grade or advanced disease among prostate cancer patients in the lowest cholesterol quartile was reduced by 33% and 27%, respectively, compared with the highest quartile, she said.

Although the study is limited by its observational design, when considered in conjunction with the earlier statin findings, "the results suggest that we may be able to prevent dangerous prostate cancers by tampering with cholesterol metabolism," Dr. Platz noted.

Lumpectomy Is a Prostate Cancer Option

BY PATRICE WENDLING

Chicago Bureau

CHICAGO — Focal cryoablation results in better local control of prostate cancer than other standard treatments, Dr. Gary Onik said at the annual meeting of the Radiological Society of North America.

"This is a very aggressive treatment, even though it is focal," said Dr. Onik, director of surgical imaging, Celebration Health/Florida Hospital in Celebration.

Pathologic literature indicates that up to 25% of prostate cancers are unifocal, and that 80% of cases would be appropriate for lumpectomy, he said.

Dr. Onik has performed focal cryoablation on 96 patients with prostate cancer, and has obtained data on 55 patients with at least 1 year of follow-up (range 1-10 years). Prostate-specific antigen (PSA) tests were obtained every 3 months for 2 years, and every 6 months thereafter. Routine biopsies were obtained in the

first 26 patients, and all were negative.

At an average of 3.5 years of follow-up, 52 (94.5%) of the 55 patients had stable PSA levels, and were disease-free according to American Society for Therapeutic Radiology and Oncology criteria. Although four patients had to be re-treated after cancer was found in another area of the prostate, there have been no recurrences in treated areas. The results are noteworthy as 29 of the 55 patients were at medium to high risk for recurrence, he said.

