Statin Use May Reduce Prostate Cancer Risk

BY SUSAN BIRK

CHICAGO — Statins may have a protective effect against prostate cancer, according to recent study findings.

The research, presented at the annual meeting of the American Urological Association, adds weight to a growing body of evidence that statins may do more than help to lower cholesterol.

In an observational study of 2,447 men followed for 15 years, patients taking statins had one-third the risk of developing prostate cancer, compared with nonusers.

“We also found that the men who were taking statin medications the longest ... had the greatest reduction in prostate cancer risk,” Dr. Rodney H. Breau of the Mayo Clinic, Rochester, Minn., reported in a press briefing. The study analyzed prostate cancer risk in men aged 40-79 years, starting in 1990 using data from the Rochester Epidemiology Project.

Statin use was associated with a reduced likelihood of exceeding the prostate-specific antigen threshold for age and a reduced risk of prostate biopsy. In a randomly chosen subset of 618 patients who agreed to undergo PSA testing every other year, 11 (6.3%) statin users exceeded age-specific PSA thresholds, compared with 65 (14.2%) nonstatin users, for an age-adjusted hazard ratio of 0.35.

Among a group of 616 statin users, 75 (12.2%) underwent a prostate biopsy and 30 (4.9%) were diagnosed with prostate cancer. Age-adjusted hazard ratios for prostate biopsy and prostate cancer diagnosis were 0.39 and 0.38, respectively, compared with nonstatin users.

“We have to be very careful about looking at the data more closely to make sure we can’t find some alternative explanation,” Dr. Breau said. “Our data indicate you probably need to be on these medications for a prolonged period of time and possibly starting at the right age to prevent cancer from developing.”

In another study presented at the meeting, there was a 30% reduction in the risk of a recurrence in PSA elevation following radical prostatectomy among statin users versus nonusers. “If these findings are confirmed in larger studies and/or randomized trials, it may be prudent to prescribe a statin to all men undergoing radical prostatectomy,” said Dr. Robert J. Hamilton of the University of Toronto.

The researchers analyzed the Shared Equal Access Regional Cancer Hospital (SEARCH) database to assess the risk of biochemical recurrence in 1,325 men who had undergone radical prostatectomy. At the time of surgery, 237 (18%) of the men were taking statins.

Statin users were 2 years older than nonusers and had undergone surgery more recently (median year of surgery, 2004 vs. 2002). At the time of the diagnosis, statin users also had lower clinical stages of disease (67% vs. 58% with T1 disease) and with lower PSA levels (6.2 vs. 6.9 ng/mL).

After adjustment for differences between the two groups, statin use appeared to reduce the risk of biochemical recurrence by 30%.

Findings from a third study presented at the meeting suggest a potential mechanism of action. The study of 254 men examined levels of prostate tumor inflammation in statin users vs. nonusers who were undergoing radical prostatectomy. A single pathologist graded tumors based on levels of white blood cells. Statin use was associated with a 72% reduction in the risk of tumor inflammation, reported Dr. Lionel L. Bañez of Duke University, Durham, N.C. Although statin users were significantly more likely than nonusers to be overweight or obese, statin use was associated with a lower risk for any tumor inflammation.

Dr. Breau, Dr. Hamilton, and Dr. Bañez had no financial disclosures related to their studies.