Hip Fractures Rose in Aged After HT Cessation

ARTICLES BY RICHARD HYER

FROM THE ANNUAL MEETING OF THE NORTH AMERICAN MENOPAUSE SOCIETY

CHICAGO – Prescriptions for hormone therapy for elderly postmenopausal women declined significantly after the results of the Women's Health Initiative were reported in May 2002, and it now appears that there has been a correspondingly steep rise in hip fracture rates, said Roksana Karim, Ph.D., of the University of Southern California, Los Angeles.

"The rise in hip fracture rates in elderly postmenopausal women may be partially attributed to the continued decline in hormone therapy use," Dr. Karim said. "Hormone therapy–related benefits on hip fracture do not carry over after cessation."

This was the conclusion of a longitudinal observational study of 80,995 postmenopausal women aged 60 years or older using data from 11 Kaiser Permanente medical centers in southern California. The study was designed to assess the risk of hip fracture for women who stopped taking hormone therapy (HT), compared with those who continued the therapy. It was also designed to evaluate the risk of hip fracture over time after stopping HT, and to measure bone mineral density (BMD) over time after stopping HT.

'Women at risk of hip fracture should consider carefully before making a decision of stopping using HT.'

DR. KARIM

Data were collected on hip fracture, HT use, and the use of antiosteoporotic medication from June 2002 through December 2008. All hip fractures were verified by chart review by an orthopedic surgeon who was blinded to patients' HT status. Exclusion criteria included fractures secondary to tumors or high-energy trauma, and periprosthetic fractures. Patients were considered to be HT users if they had filled at least two prescriptions in a given year, as each prescription provides a 3-month supply of medication. HT was defined as estrogen alone or estrogen plus progesterone.

BMD data of the hip and lumbar regions were available for 54,209 women (67%). The 80,955 women had a mean age of 68.8 years and a mean body mass index of 26.9 kg/m^2; the study's mean follow-up was 5.6 years. There were 1,419 hip fractures (2%) and 6,928 deaths (9%). In all, 15% of the 80,955 patients (12,486) were terminated from Kaiser. Between July 2002 and December 2008, HT use in this population decreased from 85% to 18%. After adjustments for age and race, women who did not use HT in the previous year had a 55% increased risk of hip fracture (hazard ratio, 1.55), said Dr. Karim. She also said that hip fracture risk significantly increased with 2 or more years of HT cessation. Mean BMD was significantly and inversely associated with cumulative years of HT nonuse, she said.

Dr. Karim acknowledged that the study was limited by lack of body mass index data in 47% of the population, or information on history of past HT use or on previous fractures.

The estimated annual cost for osteoporotic fractures in the United States is $18 billion, and hip fractures result in a greater cost and disability than do all other osteoporotic fractures combined. "Women at risk of hip fracture should consider carefully before making a decision of stopping using HT," she said.

During a question-and-answer session, Andrea LaCroix, Ph.D, professor of epidemiology at the University of Washington, Seattle, said, "It certainly comes as no surprise that women discontinue hormone therapy. There's some loss of bone density and an increase in hip fracture rates. I agree with the conclusion that women coming off hormone therapy should be counseled about their potential for losing bone and having an increased fracture risk, but they've never enjoyed more alternatives for the prevention of hip fracture than they do today, including many agents besides HT." ■

VITALS

Major Finding: Between July 2002 and December 2008, HT use decreased from 85% to 18% in postmenopausal women over age 60. After adjustment for age and race, women who did not use HT in the previous year had a 55% increased risk of hip fracture. Mean BMD was significantly and inversely associated with cumulative years of HT nonuse.

Data Source: A study of 80,995 patients in the Kaiser Permanente Southern California database.

Disclosures: Dr. Karim said she had no financial conflicts of interest. The study was supported by the University of Southern California.

Halting HT Adds 0.7 Days of Sleep Difficulty Over 2 Months

FROM THE ANNUAL MEETING OF THE NORTH AMERICAN MENOPAUSE SOCIETY

CHICAGO – Almost 40% of women report sleep problems in midlife, and since hormone therapy benefits sleep, cessation of that therapy might have the opposite effect. A study of 1,704 women from the Group Health Research Institute of Seattle confirms that it does.

"Sleep problems were related to the suspension of hormone therapy for 1 or 2 months," investigator Sarah E. Tom, Ph.D., formerly of the institute, said of the study's findings. "Women who are discontinuing hormone therapy may benefit from alternative sleep management strategies immediately following discontinuation."

Waking while sleeping was one of the most frequently reported problems.

DR. TOM

This was a secondary analysis of data from the READ study (Radiological Evaluation and Breast Density), a trial designed to test whether short-term suspension of hormone therapy (HT) resulted in better screening mammography performance. The trial recruited women aged 45-80 years from Group Health, a nonprofit health care system based in Washington state. The recruits were due for a screening mammography, and reported on use of HT for 2 years. They were randomized to continue HT or to suspend it for either 1 or 2 months prior to mammography.

The survey used a questionnaire that asked about the number of days subjects had various sleep complaints, including trouble falling asleep and waking while sleeping. Of the 1,704 women, 1,405 had complete information on confounding variables. Of this group, 518 were randomized to continue HT, 452 to suspend therapy for 1 month, and 435 to suspend it for 2 months. Sleep problems were comparable in the groups suspending HT for 1 month or 2 months.

"For the group randomized to a 2-month suspension, they had an increase of about 0.7 days with trouble with their sleep, compared to women who were randomized to continue hormone therapy," Dr. Tom said. Waking while sleeping was one of the most frequently reported problems, she said, and about 35% of women in the two hormone cessation groups reported using sleep aids in the previous week.

The trial was sponsored by the Department of Defense, the National Institute on Aging, and the nonprofit Group Health Research Institute. ■

Metabolic Syndrome Plus HT Increases Coronary Risk

FROM THE ANNUAL MEETING OF THE NORTH AMERICAN MENOPAUSE SOCIETY

CHICAGO – The results of the Women's Health Initiative randomized clinical trial suggest that postmenopausal women who begin hormone therapy may be putting themselves at risk for coronary heart disease, but a new study from the University of Oklahoma Health Sciences Center suggests that the presence or absence of the metabolic syndrome at baseline is a key determining factor.

"What we found is that if the metabolic syndrome was present, indeed there was a greater risk, greater odds of event, and this was statistically significant. In contrast, if no metabolic syndrome was present, there was no increased risk," said Dr. Robert Wild, professor of ob.gyn. and adjunct professor of medicine–cardiology at the center.

The nested case-control study examined the Women's Health Initiative cohort for an effect modification between elevated baseline risk and hormone therapy (HT). It found 359 incident cases of coronary heart disease (CHD), and matched these to 817 controls without CHD. Controls were matched with a variety of criteria, including prevalent cardiovascular disease at baseline. Trials of estrogen plus progesterone and estrogen alone were analyzed separately and in a pooled analysis. Metabolic syndrome was defined by ATP III criteria, where three of the following five criteria are met: elevated waist circumference, triglycerides, HDL cholesterol, blood pressure, and fasting glucose.

In the pooled trial analysis of estrogen plus progesterone and estrogen alone, the metabolic syndrome was found to be an effect modifier. The odds ratio for treatment effect was 0.98 for women without the metabolic syndrome and 1.72 for those with the metabolic syndrome.

The reasons for this heightened risk might be more advanced stages of atherosclerosis and a heightened thrombogenic state among women with the metabolic syndrome, he said. ■

VITALS

Major Finding: Presence of the metabolic syndrome before the start of hormone therapy increases risk of coronary heart disease.

Data Source: A study of 1,176 patients in two arms (359 with CHD; 817 controls) from Women's Health Initiative database.

Disclosures: Dr. Wild disclosed no relevant financial relationships. This study was sponsored by the University of Oklahoma Health Sciences Center.