Hip Fracture Rates Rose as Use of HT Waned

BY RICHARD HYER

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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, at the meeting.

"The rise in hip fracture rates in elderly postmenopausal women may be partially attributed to the continued decline in hormone therapy use," she said.

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.

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.

Women at risk of hip fracture should consider carefully before they stop using hormone therapy.

DR. KARIM

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.

"Women at risk of hip fracture should consider carefully before making a decision of stopping using hormone therapy," she said. ■

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Major Finding: The Women's Health Initiative reported in May 2002 that risks of coronary heart disease and cancer were associated with HT. Between July 2002 and December 2008, HT use in this population decreased from 85% to 18%. After adjustment for age and race, women who did not use HT in the previous year had a 55% increased risk of hip fracture.

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.