Factor Fracture Risk Detail Into BMD Reports

BY DIANA MAHONEY
New England Bureau

NEW ORLEANS — Giving primary care physicians quantitative information about fracture risk can help them make more judicious use of preventive drug therapy for postmenopausal women at below-average risk for osteoporosis, Joan M. Neuner, M.D., said at the annual meeting of the Society of General Internal Medicine.

In a national survey targeting a random sample of primary care physicians, those who received lifetime and 5-year quantitative fracture risk estimates along with bone mineral density (BMD) reports were less likely than those given standard BMD reports to recommend preventive prescription drugs for a 70-year-old, average-weight woman with a T score of –1.01, Dr. Neuner reported.

The survey included nationally representative proportions of general internists, family physicians, general practitioners, and ob.gyns. The physicians were asked to respond to four clinical vignettes that varied with regard to patient age, weight, and hip BMD. The survey also included Likert-scaled items to measure osteoporosis knowledge, attitudes, and screening preferences.

Of the respondents, 141 randomly received standard hip BMD measures for each vignette (reported as g/cm^2 with T score and *z* score), and 138 received augmented BMD reports, which included quantitative lifetime and 5-year risk fracture estimates derived from the Study of Osteoporotic Fractures. For each vignette, the physicians were asked to estimate the patient's hip fracture risk, compared with average-risk women of the same age and race.

Dr. Neuner and her colleagues at the Medical College of Wisconsin in Milwaukee developed a logistic regression model to adjust the results for physician specialty, physician demographics, and physician

estimates of relative fracture risk for a patient with below-average risk.

"In the unadjusted analysis, physicians who received augmented BMD reports were no more or less likely to recommend prescription medications for any of the vignettes," Dr. Neuner said. In the adjusted model, however, 25% of the physicians who received the augmented BMD would have prescribed drug therapy for the below-average-risk 70-year-old, compared with 36% of the physicians who received the standard BMD report only—a statistically significant difference, she said.

Physicians in the standard BMD group who correctly identified the woman as having a below-average risk of hip fracture based on age, weight, and hip BMD also were less likely to recommend drug therapy, she added.

The findings suggest that adding quantitative fracture risk estimates to BMD reports "has the potential to change physician prescribing behavior" for women at low risk for osteoporosis. Similarly, educating primary care providers about risk classification could change their perceptions about who should get preventive drug therapy, Dr. Neuner said. ■

United States Not Yet Ready For Gender-Blind T Scores

BY SHERRY BOSCHERT
San Francisco Bureau

SAN FRANCISCO — A trend toward using one set of parameters to diagnose osteoporosis in both men and women hasn't caught on in the United States, where sex-specific bone density scores are the norm, Eric S. Orwoll, M.D., said at a meeting on osteoporosis sponsored by the University of California, San Francisco.

Yet despite the ease of a gender-blind system and some persuasive data, using a sex-specific method is the way to go, at least until more data accumulate on bone loss and fracture risk in men, suggested Dr. Orwoll, professor of medicine at Oregon Health and Science University, Portland.

The evidence supporting the use of one set of parameters is mounting. Studies in recent years have shown, for example, that the 1-year risk for hip fracture overlaps in men and women with the same hip bone mineral densities. As the density gets lower, the risk for fracture increases at essentially the same rate in both sexes.

Such findings have led some bone experts to suggest that it would be easier and logical for clinicians to use just one reference range for diagnosing osteoporosis instead of using separate T scores for men and women. Bone densitometry machines in the United States currently calculate a sex-specific T score.

'There's a little bit of incongruity in the application of the [international] recommendations, despite the fact that they're scientifically reasonable.'

The International Osteoporosis Foundation in 2000 noted that the same absolute values of bone density in men and women yield the same absolute risk of vertebral or hip fracture, suggesting that using one threshold for calculating risk makes sense. The data on men are scanty, according to the statement.

Those who favor using one set of parameters usually propose using T scores that report the number of standard deviations between current bone density and the mean peak density of a 30-year-old female.

But the problem with using such a strategy, Dr. Orwoll said, is that only about 3% of older men would be identified as osteoporotic, in comparison with a young female reference population, while 19% of older men would be deemed osteoporotic if their T scores came from reference to young male norms.

About 25%-30% of older men will have a fragility fracture, but if the female reference range were used, only a small percentage of them would be identified as osteoporotic.

"So there's a little bit of incongruity in the application of the International Osteoporosis Foundation recommendations, despite the fact that they're scientifically reasonable," he said.

Dr. Orwoll encouraged clinicians to keep using the current system of sex-specific T scores from densitometry machines until better, long-term, prospective data on fracture risk in men become available.

He added that it's also critical to include other clinical criteria besides T scores in identifying fracture risk in men. ■