Guideline Supports Screening Men for Osteoporosis

BY SHERRY BOSCHERT
San Francisco Bureau

Providers should assess older men for risk factors for osteoporosis and measure bone density by dual-energy x-ray absorptiometry if any risk factors are present, a new guideline from the American College of Physicians recommends.

How old is "older" is left open to interpretation and is one point of difference between the new guideline and separate new guidelines issued by the National Osteoporosis Foundation (NOF) in February 2008. The recommendation by the ACP is the first from the organization to specifically address osteoporosis in men (Ann. Intern. Med. 2008;148:680-4).

The new NOF guidelines for the first time include screening and treatment in men as well as women, and recommend doing bone density testing in men aged 50-69 years who have risk factors for osteoporosis and in all men aged 70 years or older.

The new ACP guideline focuses specifically on osteoporosis screening in men and notes that the appropriate age at which to start risk assessment is uncertain. The medical evidence in the literature shows that by age 65 years, at least 6% of men have osteoporosis proved by dual-energy x-ray absorptiometry (DXA), so "assessment of risk factors before this age is reasonable" for most men, Dr. Amir Qaseem said in an interview.

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DR. QASEEM

The ACP plans to issue a separate new guideline for treating osteoporosis in men in the near future, added Dr. Qaseem, lead author of the guideline and a senior medical associate for the ACP.

The main risk factors for osteoporosis in men that should prompt providers to consider ordering a DXA scan are age older than 70 years, low body weight (a body mass index of 25 kg/m^2 or less), weight loss greater than 10% of what would be expected, physical inactivity (no regular walking, climbing stairs, carrying heavy objects, housework, or gardening), corticosteroid use, androgen deprivation therapy, or previous fracture related to fragility, the report states.

If a man with risk factors declines a bone density test, the provider should periodically revisit the topic with him and explain that the DXA scan is a painless, noninvasive test.

The new ACP guideline is based on a review of evidence published in 1990-2007 conducted by the federal Agency for Healthcare Research and Quality's evidence-based practice center in Southern California. Another article in the same issue describes the review of evidence (Ann. Intern. Med. 2008;148:685-701).

The prevalence of osteoporosis is estimated to be 7% in white men, 5% in black men, and 3% in Hispanic men. Because it's "viewed as a disease of women," it is underdiagnosed and undertreated in men, causing substantial morbidity and mortality, said Dr. Qaseem. In the next 15 years as the population ages, the rate of osteoporosis in men is expected to increase by half, with a doubling or tripling of hip fracture rates by 2040.

The prevalence of osteoporosis in Asian American men and other ethnic groups is unknown because of a lack of data. More research is needed on multiple aspects of screening for osteoporosis in men, the guideline states. ■

Thyroid Testing Isn't Needed In Most Overweight Children

BY ROBERT FINN
San Francisco Bureau

HONOLULU — Hypothyroidism has only a minor effect on weight gain, and correcting it does not result in significant weight loss, according to the findings of an observational study.

"[Physicians] have been trained that hypothyroidism causes weight gain and any child who is overweight needs to have hypothyroidism ruled out," said the study's investigator Dr. Paul Kaplowitz, chief of the division of endocrinology at Children's National Medical Center, Washington, D.C.

Hypothyroidism causes very minor weight gain and does not cause the kind of obesity so commonly seen in young patients.

DR. KAPLOWITZ

"In fact, hypothyroidism causes very minor weight gain and does not cause the kind of obesity that we're seeing so commonly in our young patients. [With] a child who is 20, 30, 50 pounds overweight, hypothyroidism should not be very high on your list," he said in an interview about the poster, which he presented at the joint meeting of the Pediatric Academic Societies and the Asian Society for Pediatric Research.

Dr. Kaplowitz and his colleague, Dr. Melissa Crocker, studied 29 moderate to severe hypothyroid and 57 hyperthyroid children referred for an initial evaluation between March 2004 and October 2007. Weight and height measurements were made at diagnosis, at the first follow-up 1-4 months after initiating therapy, and at a second follow-up at about month 6 (hyperthyroid) or month 11 (hypothyroid).

At the first follow-up, the 26 hypothyroid children receiving treatment (mean age 10.7 years) had lost an average of 0.4 kg, exactly the same amount as the 3 uncorrected hypothyroid children. At the second follow-up, the euthyroid children had gained an average of 2.0 kg while the uncorrected children had gained 0.6 kg.

Since some of this weight gain could have been explained by natural or catch-up growth, the investigators looked at the change in the standard deviation of the children's body mass index. This turned out to be –0.2 for the euthyroid children and –0.5 for the uncorrected children, which was not significantly different.

Dr. Kaplowitz said the most interesting observation was that there was no significant difference in the body mass index between the hyperthyroid and hypothyroid patients at diagnosis. "It's variable in both groups. The difference between the two is very small relative to the difference within each group."

The mean BMI of the 57 hyperthyroid children was 21.1 kg/m^2 with a range of 14.2-36.7. The mean BMI in the 29 hypothyroid children was 20.6 with a range of 15.0-40.7. There were no significant differences between the groups.

Dr. Kaplowitz said that thyroid testing might be appropriate if the child had additional symptoms beyond weight gain. "The most common symptom of hypothyroidism was feeling fatigued, but feeling colder and more depressed and decreased appetite were also common."

However, if a patient is losing weight, "think about hyperthyroidism and see if they have any of these suggestive signs: feeling hot, doing poorly in school, enlarged thyroid. Definitely hyperthyroidism should be considered if they're losing weight and have any other symptoms."

The investigators said that they had no conflicts of interest to declare. ■

Heart Risk Estimate Is Lowered For Subclinical Hypothyroidism

BY DENISE NAPOLI
Assistant Editor

WASHINGTON — An as-yet-unpublished update to a 2006 meta-analysis found that the risk of heart disease in the presence of subclinical hypothyroidism is attenuated somewhat, to about a 30%-35% increased risk from a previously estimated 65%.

However, the increase is still significant and "clinically meaningful," Dr. Douglas C. Bauer said at a meeting sponsored by the American Thyroid Association, and what to do about it remains an open question. "The issue of primary versus secondary prevention hasn't really been well looked at. There have been no randomized controlled trials looking at replacement with thyroid hormone in individuals to determine the effect on ischemic heart disease, [which] has limited [our] ability to make practice guidelines."

Even a relatively small increase in risk for heart disease is important for two reasons, said Dr. Bauer, professor of medicine, epidemiology, and biostatistics at the University of California, San Francisco.

First, subclinical hypothyroidism is a common risk factor, affecting up to 10% of the general population, and second, ischemic heart disease is the most common cause of death in the U.S. These two points add up to a potential major public health problem, said Dr. Bauer. He and his colleagues have submitted the revised meta-analysis for publication in the Annals of Internal Medicine.

The original 2006 meta-analysis included 14 studies, 1,362 coronary heart disease outcomes, and 10,540 patients (Am. J. Med. 2006;119:541-51).

In that study, researchers found a 65% increased risk of heart disease in those who had subclinical hypothyroidism compared with those who were euthyroid.

The risk was lessened slightly in some subgroup analyses according to the study design: There was an increased risk of about 40% in the five prospective cohort studies included in the meta-analysis (OR 1.42, CI 0.91-2.21), closer to the newly revised risk estimate; and a 70% increased risk in the case-control and cross-sectional studies alone (OR 1.72, CI 1.25-2.38).

Additional sensitivity and subgroup analyses in that initial meta-analysis—for example, in studies that adjusted for cardiovascular risk factors, or in studies that used different definitions of subclinical hypothyroidism according to thyroid-stimulating hormone (TSH) values—yielded variable risk factors, but none fell below 40%, said Dr. Bauer.

However, almost all of the studies relied on a single measurement of TSH, suggesting they may have underestimated the true relationship between subclinical hypothyroidism and the incidence of ischemic heart disease because it's "possible that some of those who were initially classified as having subclinical hypothyroidism later reverted to normal."

In general, Dr. Bauer advocates screening for subclinical hypothyroidism for men and women over age 50 who present at well visits with other cardiac risk factors. And although there is no clear agreement on whether subclinical hypothyroidism should be included in guidelines for risk factors for heart disease, Dr. Bauer said he thinks that they should. He added that general physicians and cardiologists are "not at all" fully cognizant of the heart risks associated with subclinical hypothyroidism.

Dr. Bauer said that he had no disclosures to make in relation to this presentation. The meeting was sponsored in part by Abbott Laboratories and the Genzyme Corp. ■