Eyesight Checks Are One Way to Reduce Fractures

BY SHERRY BOSCHERT

San Francisco Bureau

SAN FRANCISCO — Physicians who see patients with osteoporosis should have a visual acuity chart on the office wall to check eyesight, Steven R. Cummings, M.D., advised at a meeting on osteoporosis sponsored by the University of California, San Francisco.

Reduced visual acuity greatly increases the risk for falling and for hip fractures. Usually poor vision is due to treatable risk factors such as the need for an updated glasses prescription, or cataracts, said Dr. Cummings, professor emeritus of epidemiology and biostatistics at the university and director of clinical research at the California Pacific Medical Center Research Institute.

Impaired vision can double or quadruple the risk for hip fracture. At least one study shows that repairing cataracts can reduce the risk of falling by 34% (Br. J. Ophthalmol. 2005;89:53-9).

Dr. Cummings noted that the following additional risk factors are worth addressing to prevent fractures:

▸ **Vertebral fracture.** Having a vertebral fracture—even a painless, asymptomatic one that's detected only by x-ray—increases the risk for future vertebral fracture two- to fourfold. Older women with a previous vertebral fracture have a 1%-3% annual rate of hip fracture, and randomized trials suggest that pharmacologic treatment can lower that risk.

▸ **Nonspine fracture.** Having any kind of nonspine fracture nearly doubles or triples the risk for having a future nonspine fracture. This is especially true in men, and is independent of bone mineral density. Even with normal bone density, having a nonspine fracture makes a future nonspine fracture more likely.

▸ **Familial history.** People who had a parent develop a hip fracture have double the risk for hip fracture themselves, compared with people whose parents did not have hip fractures. This is true regardless of bone mineral density. A wrist fracture in a parent increases an offspring's risk of wrist fracture. "There's some suggestion that this increased familial risk may be specific to the type of fracture," he said.

Studies have found no association, however, between patients' reports of parents who had osteoporosis or spine fractures and the patients' own risk for those problems, probably because "osteoporosis" and "spine fracture" are rather nonspecific terms used with different meanings.

▸ **Weight.** Women have a higher risk for serious fractures if they are losing weight involuntarily compared with maintaining or gaining weight. The involuntary weight loss is a marker for frailty. Fractures of the hip, humerus, spine or pelvis commonly are referred to as "frailty fractures," he noted. Voluntary weight loss through diet or exercise diminishes a woman's bone mineral density, but it's not clear whether this increases fracture risk.

▸ **Corticosteroid use.** Taking more than 10 mg/day of prednisone or comparable doses of other corticosteroids reduces spinal bone density by 5%-10% in the first year, with most of the loss in the first 6 months. Higher doses reduce spinal bone density even more. Fracture risk increases even more quickly—within 1-2 months of starting corticosteroids. "There's a suggestion here that corticosteroids increase your risk for fractures in ways besides causing bone loss," perhaps by killing osteocytes in bone and limiting the ability of bone to respond to stimulators, he said.

Consider starting preventive therapy to prevent fractures if patients who will be taking steroids for at least several months have low bone densities or a history of fracture, Dr. Cummings suggested.

▸ **Smoking.** Cigarette smoking approximately doubles the risk for hip fracture regardless of bone density, probably because smoking is associated with poorer health, weaker muscles, and impaired balance.

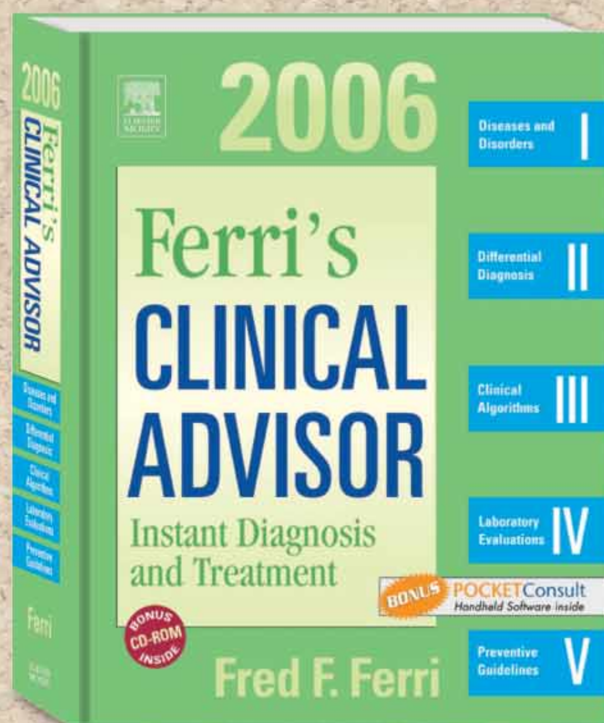
▸ **Diabetes.** Patients with diabetes have triple the risk for foot fractures and double the risk for humerus or hip fractures, compared with nondiabetic patients. If you see a patient with one of these fractures, look for diabetes, and watch for these fractures in patients already diagnosed with diabetes, he advised.

▸ **Stroke.** Patients who have had a stroke or who are in nursing homes are at very high risk for hip fractures, warranting pharmacotherapy to preserve and strengthen bone. Each year 4%-6% of nursing home patients develop hip fractures. In patients over age 70 who have had a stroke, 3%-5% of women and 2% of men develop hip fractures per year. ■

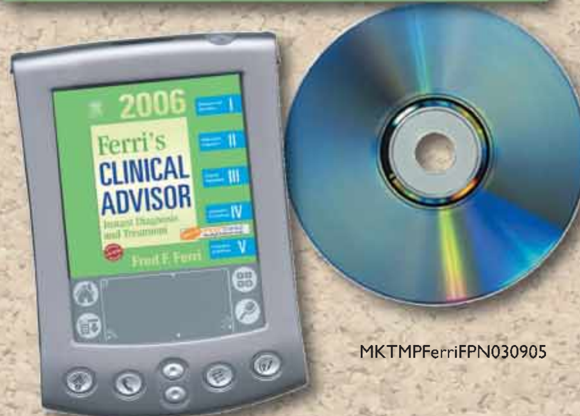
Order your copy of Ferri today and get a BONUS CD-ROM and FREE handheld software!

Delivers the at-a-glance information you need—the way you want it!

Updated annually, **Ferri's Clinical Advisor** is a fast, effective way to tap into important **diagnostic** and **therapeutic information**. What's more, you can access all this information the way you want it…from the **book**, on the **CD-ROM**, or from your **handheld device**—all for **one incredibly low price!**



- Includes a CD-ROM of the entire contents of the book with additional Patient Teaching Guides for most diseases and disorders in both English and Spanish.
- Plus, PocketConsult handheld PDA software of all the *Diseases and Disorders* section as well as the *Differential Diagnosis* section and *Laboratory Evaluations!*



MKTMPFerriFPN030905

- Order securely at www.us.elsevierhealth.com
- Call toll-free 1-800-545-2522
- Look for this title in your local medical bookstore
- See your local sales representative

Order your copy today!

© Elsevier 2005. Professional references may be tax deductible. Offer valid in USA only. Prices subject to change without notice.