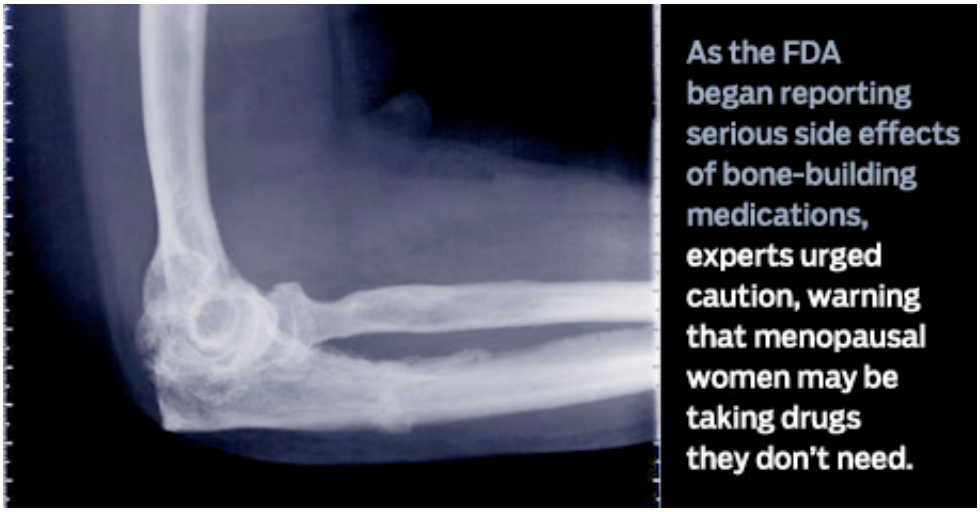
AARP Bulletin today

Are Women Being Overtreated for Bone Loss?

Many drugs have serious side effects

By: Nissa Simon | Source: AARP Bulletin Today | March 27, 2009



Nancy Hughes, 55, of Alexandria, Va., played tennis and went to the gym regularly, but recently her lower back began to hurt "on and off" after exercising. Hughes made an appointment to have it checked out. In addition to an x-ray, she had a scan that revealed osteopenia, bone density somewhat lower than normal. Her doctor wrote a prescription for a bone-building drug.

Now, she says, "I'm going to do some research, so I can understand what's happening and decide how to proceed."

Hughes found herself in a raging debate about osteopenia and how—and if—it should be treated. The condition is common in women after 50 and not as severe as osteoporosis, a bone-weakening disease that can lead to fractures. Women begin losing bone density around age 30, and the risk of osteoporosis increases with age, as the bones become thinner.

Until recently, doctors prescribed bone-strengthening drugs to women as soon as they hit menopause, when they produce less estrogen—a hormone that helps bones stay strong.

But in the last two years, as the Food and Drug Administration began reporting serious side effects of bone-strengthening medications, a number of experts urged caution, warning that many younger postmenopausal women may be taking drugs they don't need. Instead, the experts recommended giving medication only to those who have confirmed osteoporosis or who fracture a bone for no apparent reason.

For the estimated 8 million women in the United States who have osteoporosis, bone-strengthening medications can lower the chances of breaking a bone. But many experts argue that for women over 50 who have osteopenia, testing and subsequent drug prescriptions may be a waste of time and money.

In spite of recommendations to wait until age 65 to screen healthy women, many younger women undergo bone mineral density testing, which often leads to drug therapy.

"Advertising and promotional activities have frightened people about osteoporosis," says Gordon Guyatt, M.D., of McMaster University in Hamilton, Ontario. Women have gotten the message that they should be tested early, and the sooner after menopause the better. Yet, Guyatt says, the risk of fracture among younger women is very low.

Testing, treating

When should women be tested? The U.S. Preventive Services Task Force recommends that routine bone density screening start at age 65. It suggests screening women age 60 to 64 with other risk factors—such as low body weight or smoking—but notes that testing healthy women under 60 would prevent few fractures.

Recent guidelines from the National Osteoporosis Foundation (NOF) also recommend screening women without risk factors at age 65—and men at 70. It recommends treating men and women over 50 who have a 3 percent risk of hip fracture over the next 10 years or have a 20 percent risk of fracture of the spine, wrist, hip or upper arm bone over the next 10 years.

The World Health Organization has developed an online tool called FRAX so people can assess their risk of fractures within 10 years. "Osteopenia alone doesn't mean much," says Robert Recker, M.D., director of Creighton University's Osteoporosis Research Center. "What's more important is the risk of fracture. Having a 10-year projection allows you and your doctor to do some planning."

An x-ray technique called DXA or DEXA defines how far bone mineral density falls above or below the norm. In this case the norm is an average healthy woman in her 30s. The closer the score is to zero, the better the bone density. A score of -1 or higher is considered normal; -2.5 or lower signifies osteoporosis. Anything between -1 and -2.5 is labeled osteopenia, a term for low bone mass that the WHO coined in the early 1990s.

Fear of fracture

"I spend a lot of time allaying concerns among women whose risk of osteoporosis is not high but who worry," says endocrinologist Bruce Ettinger, M.D., professor emeritus at the University of California, San Francisco. "The medical term for them might be 'the worried well.' They worry because they've read about osteoporosis or heard about it or received alarming information from a friend. These women want to be able to estimate their risk."

By the time women are in their 50s, most of them will be classified as osteopenic, Ettinger says. The condition is not a disease but a marker for the risk of fractures. It's found in more than half of all postmenopausal white women in North America and 35 percent of African American women over 50. Most experts say that osteopenia does not need to be treated with drugs.

People think of their chances of breaking a bone differently once they work out the numbers using FRAX, says Lisa Schwartz, M.D., associate professor of medicine at Dartmouth Medical School in Hanover, N.H. "Taking all the risk factors into account to figure out when treatment might make sense is a much more rational approach." For example, she continues, the chance of the average 55-year-old woman with osteopenia fracturing a hip within the next 10 years is less than 1 percent. That's hardly a risk that calls for drug treatment, she says.

Furthermore, she adds, there's no evidence that long-term use of drugs in women with osteopenia will cut down on fracture risk.

Charles Barr, M.D., international medical leader for the osteoporosis medication Boniva at Roche, the drug's manufacturer, has a different take. "Treatment has been shown to be effective in preventing fractures in women with osteoporosis, and treatment has been shown to be effective in stopping or reversing bone loss in women with osteopenia," says Barr. "One of the issues is whether it's better to wait until bone loss is severe before starting treatment, or is it better to start treatment early to maintain good quality bone," he says. So far, "we have no definitive answers."

Charting the best course

There's no good information on how long people should take these drugs, according to the American College of Physicians, so some researchers argue that it makes more sense for a woman to delay taking medications until she crosses the line from osteopenia to osteoporosis.

"The less time a woman's on drug therapy, the less chance for adverse events," says Bess Dawson-Hughes, M.D., director of the Bone Metabolism Laboratory at Tufts University and chair of the committee that updated the NOF guidelines.

Many experts caution that waiting too long to start bone-strengthening medications isn't wise. Bone loss is a serious issue, and drugs can act quickly to lower fracture risk in people with osteoporosis. Even if there's some uncertainty about side effects from long-term medication use, once the possibility of a broken hip is in the picture, the benefits are real. "Hip fracture can often be the start of a spiral of terrible events," Schwartz says.

In the meantime, exercise, eat right, don't smoke and if you drink, do so moderately. That's advice the medical community agrees on.

BONING UP

* **Keep moving.** Weight-bearing and muscle-strengthening activities like jogging, tennis, dancing and weight training build strong bones and help prevent fractures. Exercise also helps develop balance and prevent falls.

* **Calcium and vitamin D.** Vitamin D helps the body absorb calcium, which helps bone strength. Consider supplements if you don't get enough vitamin D from your diet and sunshine. If you're over 50, federal guidelines recommend 1200 mg of

calcium and 800 to 1000 IU of vitamin D a day.

* **Reduce alcohol.** Heavy alcohol use can reduce bone formation. Limit yourself to no more than two drinks a day.

* **Don’t smoke.** Chemicals in cigarettes are toxic to bone cells.

* **Eat your greens**—and yellows and reds. Natural pigments called carotenoids in fruits and vegetables protect against bone loss.

Source: National Osteoporosis Foundation

SIDE EFFECTS OF OSTEOPOROSIS DRUGS

Bisphophonates, the most commonly used, include alendronate (Fosamax), etidronate (Didronel), ibandronate (Boniva), risedronate (Actonel) and zoledronic acid (Reclast).

Side effects:

* Mild gastrointestinal problems (heartburn, acid reflux, irritation of the esophagus, nausea and vomiting) and more serious (ulcers and bleeding)

* Severe muscle, joint or bone pain

* Esophageal cancer

* Breakdown of the jawbone

* Atypical bone fractures

* Increased rates of a serious heart rhythm abnormality

Selective estrogen receptor modulators (SERMs), raloxifene (Evista)

Side effects:

* Hot flashes

* Leg cramps

* Blood clots

Hormones, estrogen or estrogen plus progestin (Premarin, Prempro, Premphase)

Side effects:

* Stroke

* Blood clots

* Breast cancer

Calcitonin (Miacalcin, Fortical)

*Nasal irritation when taken by nasal spray

Sources: U.S. Agency for Healthcare Research and Quality, U.S. Food and Drug Administration, National Institutes of Health

Nissa Simon writes about health issues and lives in New Haven, Conn.