

Osteoporosis and the importance of getting a bone density scan

Osteoporosis is a condition characterized by weakened bone strength. Normally, calcium and other minerals are lost slowly from bone with aging, a process which starts at about age 30. When this loss is excessive the density of the bone and its structure deteriorates, leading to an increased risk of fractures of the hip, spine, and wrist.

Men as well as women can be affected by osteoporosis, a disease that can be prevented and treated. Osteoporosis and low bone density together affect as many as 50 million Americans.

In some ways, women have an advantage in that estrogen, the female hormone they produce reduces the 'normal bone loss process'. But after menopause, when estrogen levels reduce a lot, bone loss speeds up significantly. As a result, more women than men suffer from osteoporosis and fractures, and nearly half of all women will have a fracture in their lifetime as a result (and nearly a quarter of men will too).

Certain chronic health conditions increase the risk of osteoporosis. Also, individuals taking certain medications (such as prednisone, immunosuppressive drugs and others) have even more risk.

If diagnosed early, fractures associated with the condition can often be PREVENTED. Unfortunately, osteoporosis frequently remains undiagnosed until a fracture occurs.

BONE DENSITY SCANNING

A bone density scan measures how dense bones are, and can detect thinning of bones at an early stage. It is an important screening test to have done, especially if you are at additional risk because of your age, gender, chronic condition or because of medications that you are at taking.

IF YOU ALREADY HAVE OSTEOPOROSIS, a bone density scan detects how fast the disease is progressing, and is used as a way to monitor your therapy and progress.

Most bone density scans use DEXA (which means Dual Energy X-ray). This is a low energy form of X-ray that has much less radiation than a Chest X-Ray. The scan is easy and painless to have, and typically checks your HIP or SPINE density in about 15 minutes. Your results are usually reported as "T-scores" which are a way of comparing your bone density to a typical 30-year-old.

Recommendations

All women over age 65 should get a bone density scan, according to the U.S. Preventive Services Task Force.

Also recommended is screening individuals over aged 60, with risk certain risk factors for osteoporosis. These include:

- History of ever taking oral corticosteroids for more than 3 months
- Certain medical conditions like rheumatoid arthritis, hyperthyroidism, kidney disease
- Previous bone fracture as an adult
- Smaller, thin boned individuals
- Having an immediate family member with a osteoporosis
- Poor general health and cigarette smoking

Special cases

Your doctor may recommend screening based on the above risk factors or other conditions at a younger age than generally recommended.

If you already have a diagnosis of osteoporosis, are being treated for it or are at high risk for it, having a bone scan at least every 2 years is typically recommended. In some situations, checking bone density more often may be necessary (for example in individuals taking high doses of corticosteroids. Please check with your doctor regarding your situation.

In summary bone density tests are important in the prevention and management of osteoporosis and fractures and can:

- Detect low bone density before a fracture occurs.
- Confirm a diagnosis of osteoporosis if you already have one or more fractures.
- Predict your chances of having a fracture in the future.
- Monitor the effects of treatment if the test is repeated.

References

National Institutes of Health, Osteoporosis and Related, Bone Diseases: National Resource Center - Osteoporosis Overview

U.S. Preventive Services Task Force (USPSTF) recommendation on screening for osteoporosis in postmenopausal women , in the Guide to Clinical Preventive Services, Second Edition1. <http://www.ahrq.gov/clinic/3rduspstf/osteoporosis/osteorr.htm>