# **OPATIENTI**nformation

## **Managing Osteoporosis**

O steoporosis (ahs-tee-oh-puh-roe-sus), which means, "porous bone," is a disease of the bones that happens when you lose too much bone, make too little bone, or both. This disease can result in weak bones and bones breaking from a minor fall or, in serious cases, from sneezing or bumping into furniture. Osteoporosis can strike at any age, and even though it is more common in women, both men and women can have the disease.

#### Osteoporosis is:

- **Common.** About 10 million Americans live with osteoporosis, and 34 million more are at risk for the disease. According to estimates, half of all women > 50 years of age, and 1 in 4 men, will break a bone due to osteoporosis.
- Serious. A broken bone is a serious complication of osteoporosis, particularly if you're elderly.
- **Costly.** By 2025, experts predict that osteoporosis will be responsible for about 3 million fractures and \$25.3 billion in costs annually.
- Silent. Osteoporosis is called the silent disease because you could have the disease or be at risk for it without knowing it. The first clue that you have osteoporosis is usually a broken bone.

#### How do I know if I'm at risk?

- Risk factors for osteoporosis include:
- Family history
- Amenorrhea (ay-men-oe-ree-ah), an abnormal absence of menstruation
- Early menopause
- Inadequate calcium or vitamin D intake (a possible result of alcoholism, anorexia, or celiac disease)
- White or of Asian descent
- Smoking

- Adult history of bone fractures
- Having a small or thin body frame
- Type 1 diabetes
- Thyroid or kidney disease
- Immobility or inactivity
- Certain drugs (eg, chronic corticosteroid [kortih-koe-stehr-oyd] intake, anticonvulsants [ann-tee-kon-vuhl-sents], immunosuppressants [ih-myoo-noe-suh-preh-sents], antiestrogens [ann-tee-ehs-troe-jehns])

#### What are the warning signs?

Osteoporosis is called a silent disease because it progresses painlessly until the bones are at risk for a fracture. Osteoporosis can cause the vertebrae (vehr-tuh-bray)—the disks that make up your backbone—to collapse. You may not realize you have osteoporosis until you have a fracture. Sometimes there are symptoms, including backache and gradual loss of height with stooped posture. Sudden severe back pain can indicate a spinal compression fracture caused by osteoporosis. A loss of bone in the jaw, revealed by dental X-rays, can also be sign of this silent disease.

### How can I avoid the problem?

Measures you can take to help prevent the onset of osteoporosis include adequate intake of calcium (especially from dietary sources) and vitamin D, weight-bearing exercise, and drug therapy if you're at risk for developing this disease. These are the following recommended daily calcium intakes:

- Adults  $\leq$  24 years of age: 1,200 mg to 1,500 mg
- Women between the ages of 25 and 50: 1,000 mg
- Postmenopausal women on estrogen replacement therapy (ERT): 1,000 mg
- Postmenopausal women not on ERT: 1,500 mg
- Men and women >65 years of age: 1,500 mg
- Pregnant or lactating women: 1,200 to 1,500 mg

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#### When do I need medical attention?

If you are >50 years of age and have broken a bone, you should ask your doctor for a bone density test. These are some ways your doctor may perform a bone density test:

- **DEXA scan.** This is the most commonly used test in the assessment of bone density and measures the spine, hip, or total body density to help determine fracture risk.
- **Blood test.** A blood or urine test to see the metabolism of bone provides your doctor with clues to the progression of osteoporosis.
- **Ultrasound.** Your doctor may order this test, usually of the heel of your foot, to detect early signs of osteoporosis.

Your doctor will ask you about your lifestyle, medical history, whether anyone in your family has had osteoporosis or broken bones, and whether you're taking a medication or have another disease that can worsen bone loss.

#### How is it treated?

Although there is no cure for osteoporosis, there are ways to lessen its effects and even recover some bone mass. Drugs that are appropriate and effective for one person may not be the right choice for another person. The same medicine may have different effects in different people.

**Bisphosphonates** (by-fos-fah-nates). You can help slow the breakdown of bone with drugs in this class.

**Calcitonin** (kal-sih-toe-nin). This drug class is approved for the treatment of osteoporosis in postmenopausal women who are at least 5 years beyond menopause.

**Hormone replacement therapy.** If you're a postmenopausal woman who wants to reduce bone loss as well as increase bone density in both the spine and hip and reduce the risk of hip, spine, and other fractures, ask your doctor about these drugs.

**Osteoclast** (ah-stee-oh-klast) inhibitor (ihn-hih-bih-tehr). Denosumab (deh-no-soo-mahb)

is approved for the treatment of osteoporosis in postmenopausal women at high risk of fracture and to increase bone mass in men who have a high risk of fracture.

**Parathyroid** (pah-rah-thy-royd) hormone. Teriparatide (teh-ree-pah-rah-tyde), a drug in this class, may increase the rate of bone formation.

Selective estrogen receptor modulators (mod-yoo-lay-tehrs). Raloxifene has been approved for treating and preventing osteoporosis in postmenopausal women.

Although you can't always prevent osteoporosis, you can delay its onset and reduce its severity. Most important, by taking steps to build and maintain strong bones, you can protect yourself against serious fractures. To find more information about osteoporosis, log on to the National Osteoporosis Foundation website, http://www.nof.org.

#### Notes:

