More Than Sticks and Stones Break Bones

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steoporosis is a major healthcare problem affecting 10 million Americans today; 44 million are at risk.1 The incidence is so great that osteoporotic fractures in women number more than heart attacks, stroke, and breast cancer combined.2 The reason for the importance of managing osteoporosis is beyond numbers, however. It involves the burden of the disease. The burden is such that two thirds of patients who have fractures never regain pre-fracture function.3 This makes osteoporosis of special concern within assisted living (AL) facilities because residents who suffer a fracture are at high risk for not being functionally able to return to their homes in the facility.

Unfortunately, more than 75% of patients with fractures never receive a diagnosis or treatment for osteo-porosis.⁴ In part, this is because many vertebral fractures are asymptomatic. Also, many seniors and clinicians view the signs and symptoms of osteoporosis as a natural part of aging rather than a preventable or treatable medical condition.

The signs of osteoporosis that are not consequences of aging include:

- Height loss
- Dowager's hump
- Back pain
- Fragility fractures

Even before these signs of osteoporosis appear, clinicians should identify seniors at risk (Table 1) so that steps can be taken to prevent these signs from ever developing. AL facilities should educate residents about preventable risk factors including fall prevention, smoking cessation, maintenance of adequate nutrition, and moderate use of alcohol and caffeine.

All seniors who are considered at risk or who show any signs of osteoporosis should be referred to a physician for diagnosis and treatment. This clinical evaluation includes a comprehensive medical history of signs and symptoms of bone mineral loss, an assessment of risk factors of osteoporosis, and a physical examination. The diagnostic studies for osteoporosis include a bone mineral density (BMD) test assessed by dual x-ray absorptiometry (DXA), a quantitative ultrasound of the heel, or a quantitative computed tomography or radiography looking for osteopenia and vertebral deformity.

A BMD scan is recommended for women who are:

- Postmenopausal, less than age 65, and who have 1 or more additional risk factors for osteoporosis
- Age 65 and older regardless of additional risk factors
- Postmenopausal who present with fractures (to confirm diagnosis and determine disease severity)
- Considering therapy for osteoporosis

Encourage seniors who are already being treated for osteoporosis to continue their therapy because the treatment of osteoporosis is lifelong. Treatment includes 1200 mg of calcium and 600 IU of vitamin D daily, plus a bisphosphonate as directed. By identifying seniors at risk and helping them to seek and continue

Table 1. **Risk Factors**

- Old age
- Female gender
- Family history and personal history of fractures as an adult
- Caucasian and Asian race
- Small-boned and thin frame (less than 127 pounds)
- Normal or early menopause (brought about naturally or because of surgery)
- Current cigarette smoking
- Excessive alcohol use
- Inadequate calcium intake
- Little or no weight-bearing exercise
- Medications/chronic diseases

treatment, you can help seniors avoid the burden of osteoporosis and maintain their quality of life in the least restrictive setting possible. ALC

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