

Case Study

Remembering to Diagnose and Treat Osteoporosis in Seniors Who Present With Falls

An 80-year old woman is seen in your practice after falling while walking in her kitchen. There was no loss of consciousness, and her vitals remained stable. You review her medication list to assess for possible contributing factors, and note that she is not receiving medication for osteoporosis. You review the "ACE Card" and consider a directed approach.

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Acute Care for Elders (ACE) Program
Aurora Health Care/UW School of Medicine & Public Health

Background Information:

- Many individuals who sustain an osteoporotic fracture remain untreated for osteoporosis.
- Attention is commonly directed toward the injury of a senior who has fallen.
- Work up is often directed to prepare the patient for surgery to repair their fracture.
- The assessment of the senior for falls may neglect the proper evaluation for osteoporosis.
- One in two women and one in three or four men experience a fragility fracture after age 50.
- Some seniors, who present with falls have already had a history of prior fracture, yet have not been diagnosed with osteoporosis.
- The emergency department provider and/or the primary care clinician can initiate the clinical assessment and diagnosis of osteoporosis and formulate the treatment plan.

Directed History:

- Advanced age? Any malignancies? Endocrine diseases?
- Any recent falls? (Seniors may not spontaneously report a fall.)
- New onset of pain of the back, hip, knee, pelvis?
- Any prior history of fractures as an adult?
- Any family history of fragility fracture?
- Current smoking history. Any alcohol abuse?
- Use of oral corticosteroid therapy, anticonvulsants, excessive thyroid replacement?

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Directed Physical Examination:

- Vital signs: Accurate height measurement; orthostatic blood pressure measurement.
- Constitutional Exam: Kyphoscoliosis, decreased height compared to their adult baseline.
- Back: Local tenderness
- Extremities: Any deformity or leg length discrepancy?
- Neurologic:
 - Any evidence of cognitive impairment?
 - Any Parkinsonism?
 - As appropriate: "Get up and go" gait assessment.
 - Waddling gait of Vitamin D deficiency?
 - Vision assessment.

Laboratory Assessment:

- CBC, Comprehensive metabolic panel, 25-hydroxy Vitamin D level, TSH if patient is taking thyroid supplement.

Imaging:

- Appropriate views of potential fracture site.
- Measurement of lumbar spine and proximal femur DXA bone mineral density, if not recently assessed.

Treatment:

The American College of Physicians recommends that clinicians offer treatment to men and women who have known osteoporosis and those who have experienced fragility fractures.

Reference: Hansen K E., Binkley N., Osteoporosis in Duthie E., Katz P., Malone M., *Practice of Geriatrics 4th ed.* 2007 Saunders Elsevier Publishing.

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This ACE (Acute Care for the Elderly) Card™ on *Remembering Osteoporosis Prevention* was developed by Dr. Michael Malone at Aurora Health Care in Milwaukee, WI. These geriatric care reminder cards will be published in *MPM* as resources to help clinicians manage common conditions that plague elderly patients. The complete series of cards can be ordered from Dr. Malone at Michael.Malone.MD@aurora.org. Michael Malone, MD, is the Medical Director of Senior Services at Aurora Health Care in Milwaukee, WI.