Barriers to Postfracture Osteoporosis Care in Postmenopausal Women

Challenges and Opportunities

Osteoporotic fractures commonly occur in the years following the menopause. Observational studies of the natural history of postmenopausal osteoporosis have demonstrated that if left untreated, individuals with osteoporotic fractures will have progressive loss of bone and a clinical course characterized by multiple fractures.¹ Primary prevention of osteoporosis begins before the menopause, and women who do not achieve a desirable peak bone mass will sustain fractures at a greater frequency than those who achieve higher bone densities by age 35 years. Primary prevention continues in the menopause through maintenance of bone strength by exercise and sufficient intake of dietary calcium and vitamin D. If bone loss is identified, then secondary prevention begins with consideration for use of antiresorptive therapy. Finally, tertiary prevention involves initiating antiresorptive therapy after a fracture; which has been shown to be cost-effective.²

Despite medical literature about prevention and treatment of osteoporosis, society and probably physicians as well, have been accepting of the notion that elderly women will sustain fractures simply as an inevitable part of aging. With the identification of medical treatments to halt progression of osteoporosis, there has been a paradigm shift in how we view osteoporosis. It is increasingly seen as a treatable medical condition. Primary prevention remains an important area to target, yet as clinicians, we are still faced with an aging population that sustains costly osteoporotic fractures. Medical antiresorptive treatment or tertiary prevention of osteoporosis after moderate trauma fracture (by convention defined as a fall from standing height or less) has been the focus of recent work in this field. The thrust of this change in our thinking probably stems from the demonstration in randomized controlled trials of medical therapies that significantly reduce the rate of subsequent fractures.

Despite the availability of a number of medical therapies for osteoporosis prevention, a deficit in the use of such therapies has been identified in the management of classic osteoporotic fractures: the proximal femur, the distal forearm, and the vertebral compression fracture.³⁻⁵ In the article by Simonelli et al.,⁶ an intervention was developed that targets point-of-fracture care and subsequent referral for testing and consultation. Because the orthopedist is the initial point of contact, it seems clear that this interaction would offer a unique opportunity to begin the process of referral, education, or even testing.

The current delivery of postfracture osteoporosis care is clearly an important target, yet there may be additional barriers that prevent ongoing use of interventions for

osteoporosis. Like other preventive therapies in which the disease is virtually silent until an outcome occurs, acceptance of the therapy and adherence to long-term therapy for osteoporosis will pose difficult challenges. Existing therapies have side effects that may prevent long-term adherence to a single therapy and may require changes over time. Ongoing monitoring is needed to ensure successful adherence and to lessen adverse effects. Clearly, a partnership between the treating orthopedist and the primary care physician will be necessary for timely referrals and initiation of interventions, when appropriate.

Other more traditional barriers may limit the delivery of care to the postfracture population, especially access to health care. Patients may have unequal access to medical care because of physical, geographic, or financial limitations. This was evident in the results of the National Health and Nutrition Evaluation Survey, which found that only 5% of individuals found to have markedly reduced bone density were aware of the diagnosis or had received counseling about osteoporosis.⁷ Finally, and possibly most importantly, the costs of prescription medications are often not covered by insurance programs for the elderly. Thus, the ability to pay for costly osteoporosis therapies and ongoing medical visits may limit adherence to therapy.

Even when the system is improved, there may be obstacles such as patient perceptions and beliefs about treatment after fracture. In a managed care setting in which prescriptions were covered by the plan, only one quarter actually filled the prescriptions for osteoporosis after an osteoporotic fracture.⁸ In a study of health beliefs after distal forearm fracture, the majority did not perceive osteoporosis as a serious problem, and women were not concerned about their personal risk for future fractures.⁹ Continued efforts will be needed to address barriers to osteoporosis care, from the system of health care delivery, to the financial constraints or physical barriers, to the patient-centered factors.

As the population continues to age, attention to all levels of prevention from primary to tertiary will be needed to have a significant impact. Tertiary prevention that makes use of effective interventions for osteoporosis will be critical to reducing the disability, loss of independence, morbidity, and mortality associated with fractures. High-quality postfracture osteoporosis care will probably need to encompass not only medical treatment but also other interventions, such as education about fall prevention, maximizing calcium intake, and improving exercise in this population. A collaborative approach to the care of the

postfracture patient will be needed to reduce the burden, both on the individual and on society, of future fractures.—**MARIA-TERESA CUDDIHY, MD, MPH**, *Mayo Clinic, Rochester, Minn.*

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