Fragility Fractures: Are We Using This Teachable Moment Effectively
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Introduction: Osteoporosis related hip fractures can often be prevented or minimized with appropriate preventative care. However, few patients receive appropriate screening and treatment before and after a hip fracture. The purpose of this study was to identify patients treated for hip fracture within our institution’s private practice and to assess whether those patients had adequate osteoporosis management pre-fracture and post-fracture.

Methods: Charts of all patients with osteoporosis-related hip fractures treated by the faculty over a 15 month period were retrospectively reviewed. Patient age, gender, BMI, injury date, associated fracture, subsequent fractures, dual-energy x-ray absorptiometry (DXA), and pharmacologic treatments were identified. Risk factors and comorbidities as identified by the American Orthopaedic Association, and the National Osteoporosis Foundation were also recorded.

Results: A total of 95 patients that met inclusion criteria were identified for the study. The vast majority of patients had at least one risk factor for osteoporotic hip fracture (96%). Decreased patient mobility (50%), a history of falls (39%), and dementia (33%) were the most common risk factors. Only 17.9% of patients received DXA scans pre-fracture and only 6.7% post-fracture. The majority of patients did not receive a DXA scan at any time point (72.6%). Despite having risk factors pre-fracture, a small percentage of patients received treatments including calcium (17%), vitamin D (16%), and both calcium and vitamin D in combination (13.8%). An even smaller number received the combination of calcium, vitamin D, and pharmacologic treatment such as a bisphosphonate (2.1%). These values did not substantially increase after the hip fracture (22.7%, 22.7%, 19.3%, 6.8%).

Conclusions: Patient workup and treatment before and after hip fracture is still not adequate. Despite multiple risk factors, the number of patients receiving DXA is still very low. The hip fracture event, which some authors consider a sentinel event, did not significantly increase the number of patients who received a DXA scan or pharmacologic treatment. Even with known risk factors in addition to the hip fracture, osteoporosis management did not improve post fracture.