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Does the AOA Really “Own the Bone?”

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Keywords

Osteoporosis, fragility fracture, bisphosphonates, DEXA bone scan, Own the Bone

Abstract

Purpose:

The American Orthopaedic Association (AOA) launched the “Own the Bone” program in 2009 for preventative counseling and treatment of osteoporosis following fragility fractures. This study investigates the annual rates of DEXA bone scans and bisphosphonates prescriptions since Own the Bone’s creation.

Methods:

A longitudinal cohort database (PearlDiver) was queried for patients (age 55-85) who sustained a hip fracture requiring surgical intervention from 2010-2022. The annual rate of DEXA scans within one year of fracture fixation and bisphosphonate treatment within 6 weeks and 1 year were analyzed. Other independent variables compared were age, gender, obesity, tobacco use, and alcohol use.

Results:

227,039 patients (mean age male 73.7 ± 6.9 and mean age female 74.4 ± 6.2) met inclusion criteria. Patients receiving DEXA within one year of fracture fixation were younger (72.0 ± 7.2 vs 74.3 ± 6.4) and more likely to be female (6.5% vs 3.0%). Tobacco-users, alcohol abusers and obese patients were more likely to obtain DEXA. Comparison of annual rate of DEXA scan (2010-2019) showed no significant change, ranging from 5.5% to 6.2%. Bisphosphonate prescription within one year of fracture fixation decreased from 7.5% to 6.0% from 2010-2019. Less than 2% of the patients received bisphosphonates within 6 weeks of fracture fixation with no change over years compared. Patients receiving bisphosphonates were younger (72.9 ± 6.4 vs 74.2 ± 6.4), more likely to be female (8.6% vs 2.2%), obese (7.5% vs 6.3%), and tobacco-users (7.0% vs 6.1%).

Conclusion:

The Own the Bone program has not positively changed physician behaviors in treating osteoporosis. It's suspected that inadequate incentive for orthopedic surgeons' time and their lack of bandwidth to provide extensive osteoporosis counseling following fracture contributes to this outcome. We propose healthcare institutions should consider systemic programs that promote teamwork between medical specialties to improve patient care following fragility fractures.