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**Despite the known role of vitamin D in preventing osteoporosis and related fractures,
less than half of elderly hip fracture patients take supplements as recommended**

SAN DIEGO, Calif. (March 14, 2017)—Despite national recommendations for daily vitamin D intake, a new study presented today at the [2017 Annual Meeting of the American Academy of Orthopaedic Surgeons \(AAOS\)](#) found that just 45.7 percent of patients reported consistently taking vitamin D supplements following a [hip fracture](#), a known treatment and preventative strategy for [osteoporosis](#).

In the U.S., an estimated 44 million people have osteoporosis and another 10 million are at risk for the disease which causes progressive bone loss and increased fracture risk. One in two women and one in four men older than age 50 years will sustain a bone fracture caused by osteoporosis. These potentially debilitating injuries include fractures of the hip, spine, wrist, arm or leg, often occurring from a fall. A bone fracture is often the first sign of the disease which develops slowly with no other symptoms. Treatments, which include medication, weight-bearing exercise, and/or vitamin D, calcium or estrogen supplements, can prevent subsequent fractures.

The U.S. Food and Nutrition Board (FNB) at the Institute of Medicine of The National Academies recommends 600 International Units (IUs) of vitamin D each day for adults, and 800 IUs for Americans age 71 and older.

In this study, Canadian researchers interviewed 573 hip fracture patients about their vitamin D intake during doctor visits for two years following hip fracture surgery. The mean patient age was 74.1, and the majority of patients (66.3 percent) were women.

Less than 50 percent (47.5 percent) of the patients consistently took vitamin D supplements as recommended, 35.6 percent took supplements inconsistently, and less than 19 percent took no supplements. Despite well-developed guidelines and close follow-up in a clinical trial, a low proportion of elderly hip fracture patients are consistently taking vitamin D. This suggests a need to develop and evaluate additional strategies to promote compliance.

“Vitamin D supplementation following hip fracture surgery is grossly under-prescribed,” said co-study author Mohit Bhandari, MD, an orthopaedic surgeon and research chair in musculoskeletal trauma and surgical outcomes, at McMaster University in Ontario, Canada. “Given its potential to improve patient function independent of other therapies, it seems improved advocacy and education—aimed at doctors and patients—about vitamin D supplementation is both worthwhile and evidence-based.”

Added co-study author Earl Bogoch, MD, an orthopaedic surgeon at the University of Toronto: “The benefits, safety and ease of taking vitamin D appear to be unknown or ignored by this representative cohort group of elderly osteoporotic patients who are identified by numerous guidelines as being most likely to benefit.”

The AAOS position statement, [“Orthopaedic Care of Patients with Fragility Fractures,”](#) recommends that U.S. physicians proactively screen, monitor, and, if necessary, assist in getting treatment for elderly and other at-risk patients for osteoporosis following an initial bone fracture to prevent subsequent fractures.

[Study abstract](#)

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