Rx associated with fracture risk infrequently reduced after fracture occurrence

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Is the occurrence of a fragility fracture - where Medicare beneficiaries broke a hip, wrist or shoulder - a missed opportunity to reduce exposure to prescription drugs associated with fracture risk?

Jeffrey C. Munson, M.D., M.S.C.E., of the Geisel School of Medicine at Dartmouth, Lebanon, N.H., and coauthors tried to answer that question in an article published online by *JAMA Internal Medicine*.

The authors analyzed data from a sample of Medicare beneficiaries because fragility fractures in older adults are a substantial source of sickness, death and health care costs. Patients who experience a fragility fracture are at increased risk of experiencing another one.

The study included 168,133 community-dwelling Medicare beneficiaries (84.2 percent of whom were women) who had an average age of 80 and who had survived a fracture of the hip, shoulder or wrist. Medicare Part D retail pharmacy claims were used to measure fills for prescriptions associated with increased fracture risk. There were 21 drugs classes divided into three categories: increased risk of fall, decreased bone density or unclear primary mechanism for increasing fracture risk.

The authors report:

- About three-quarters of patients were using at least one nonopiate drug associated with increased fracture risk in the four months before their fracture.

- About 7 percent of patients discontinued this drug after their fracture but that decrease was offset by new users of the drugs so the proportion did not change.

Limitations of the study include data that only included Part D enrollees who tend to have more coexisting illnesses and higher overall drug utilization rates so the results may not be generalizable to other groups.

The authors also note other caveats: many drugs have important indications that may preclude them from being discontinued after a fracture; the magnitude of the risk associated with many prescription drugs remains uncertain among those who survive fractures; and the way to improve physician prescribing practices after a fracture is not clearly developed.

"The use of drugs that can contribute to elevated fracture risk is common among Medicare beneficiaries who experience a fragility fracture, and the fracture event does not consistently lead to a reduction in use of these drugs. This suggests that at least some secondary fragility fractures may be preventable through a more concerted effort to manage high-risk drugs around a primary fracture event. Additional research is needed to quantify the possible benefits associated with modifying postfracture drug exposure in this high-risk population," the study concludes.

"The findings of Munson et al suggest that far too often clinicians fail to perform a thoughtful medication review for patients with a fracture or to act on this review. A thoughtful review should include discussion of reducing or eliminating medications associated with falls and bone loss whenever possible," write Sherry D. Berry, M.D., M.P.H., and Douglas P. Kiel, M.D., M.P.H., of Beth Israel Deaconess Medical Center and Harvard Medical School, Boston, in a related commentary.

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