MedicalXpress

After a fracture, it's time to rethink medications

August 22 2016

With half of all women and a quarter of all men over fifty expected to suffer a fracture in the years ahead, the number of such injuries exceeds the incidence of heart attack, stroke, and breast cancer combined. By discouraging the use of medications that can cause dizziness or loss of balance and prescribing medications known to prevent bone loss, clinicians can help patients lower their risk of falls and fractures.

In a commentary published today in *JAMA Internal Medicine*, gerontologists at Beth Israel Deaconess Medical Center and Hebrew SeniorLife Institute for Aging Research underscore the importance of reviewing patients' prescription medications in the wake of a fracture. Appearing alongside original research by Munson et al that finds few changes are made to patients' prescription medications in the four months following a fracture, the commentary is a call for clinicians to coordinate care among orthopedics, rehabilitation services and primary care to reevaluate patients' medication use.

"The findings of Munson et al suggests that far too often clinicians fail to perform a thoughtful medication review for patients with a fracture," said corresponding author Sarah D. Berry, MD, MPH, assistant professor of medicine in the Division of Gerontology in the Department of Medicine at Beth Israel Deaconess Medical Center and Harvard Medical School (HMS), as well as assistant scientist II at the Hebrew SeniorLife Institute for Aging Research. "It's imperative that researchers and clinicians work together to narrow this treatment gap and reduce secondary fractures and their devastating consequences."

More than 20 percent of older people who break a hip die within a year - a death rate two- to four-times higher than that among uninjured people the same age and sex. Other complications of broken bones among the elderly include pain, depression, infection, functional decline and subsequent fractures.

Berry and co-author Douglas P. Kiel, MD, MPH, professor of medicine in the Department of Medicine at BIDMC and HMS, and senior scientist and director of the Musculoskeletal Research Center at the Hebrew SeniorLife Institute of Aging Research, suggest a two-prong approach for clinicians considering patient medications after a fall or fracture.

First, clinicians should consider reducing or discontinuing the use of drugs linked to increased risk of falls or fractures - especially psychotropic medications such as sleep aids, sedatives and antidepressants that can cause dizziness or loss of balance. But when Munson et al looked at prescription drug use in the four months before and after a hip, forearm or wrist fracture in a group of older, community-dwelling Medicare beneficiaries, they found that more than 85 percent of them were taking one or more of the drugs known to increase fracture risk after their injury.

"Given the robust evidence linking psychotropic medications with falls and fractures, the lack of decline in the use of these medications after a fracture is alarming," Berry and Kiel wrote.

Clinicians may avoid broaching the topic of reducing use of this class of medications based on a perception that patients may be dependent on them, the authors suggest. However, they cite previous research indicating that after patients were given a simple pamphlet describing the risks associated with the sedative benzodiazepine, 38 percent of study participants voluntarily discontinued using it, compared to just 11 percent of the control group.

Second, clinicians should prioritize prescribing drugs known to prevent the likelihood of fractures among this high-risk group, the authors wrote. The National Osteoporosis Foundation recommends osteoporosis medication for all adults over 50 who have fractured a hip. Yet Munson et al found that less than a quarter of hip fracture patients received a common osteoporosis medication known to reduce the risk of fracture. Another recent study using commercial insurance claims saw even lower numbers, around 15 percent.

Berry and Kiel suggest that multiple care teams working across various medical settings can make it unclear which provider should conduct this post-fracture medication review. Primary care physicians are generally not involved in the immediate care of fractures, the authors wrote, but orthopedic specialists may not have the long-term relationship necessary to help make risk/benefit decisions about certain sleep or mood medications.

"Most clinicians wouldn't dispute the importance of medication review for patients following a fracture but the question is who should do it," Berry said. "We challenge all clinicians to work together to reduce the use of drugs linked to falls and fractures and to treat patients with drugs that can prevent subsequent fractures. We also encourage patients who have experienced a fall or fracture to initiate a discussion with their doctors about the risks and benefits of medications associated with falls and bone loss."

Provided by Beth Israel Deaconess Medical Center