DO PATIENTS RECEIVE RECOMMENDED TREATMENT OF OSTEOPOROSIS FOLLOWING HIP FRACTURE IN PRIMARY CARE?

The following is a summary of an article by Robert J. Petrella and Tim J. Jones.

- In this study of 174 patients with osteoporosis treated for a hip fracture, most were not taking the recommended drug and supplement therapy 12 months after their discharge from a rehabilitation program at Parkwood Hospital in London, Ontario.
- The authors suggest that under-treatment of osteoporosis is partly caused by the lack of communication between primary-care physicians and the acute-care physicians who treat osteoporotic fractures.

Osteoporosis is a chronic and progressive condition that diminishes bone mass, making bones more vulnerable to fracture. Studies have found that patients with osteoporosis who take a combination of calcium, vitamin D and residronate (a drug that inhibits bone deterioration) increase their bone mineral density and reduce the risk of fracture. The Clinical Practices Guidelines for the Diagnosis and Management of Osteoporosis, which provide clinical guidelines for healthcare providers, recommend a treatment including those supplements and medication for people diagnosed with osteoporosis.

Researchers at the University of Western Ontario set out to explore how osteoporotic hip fracture patients were being treated at the time of their fracture and how well they followed the clinical practices guidelines-recommended treatment during the following year of their discharge. The researchers were interested in identifying treatment gaps by associating patient characteristics and compliance levels with the knowledge and confidence levels of their primary-care physicians.

Prior to the study, the authors sent a brief educational intervention comprised of a statement of clinical practices guidelines recommendations to all practicing primary-care physicians within the referral network of Parkwood Hospital in London, Ontario. They asked physicians to rate their knowledge of osteoporosis management and their confidence in treating patients with the condition. To determine physicians’ confidence and perception of knowledge, the researchers used a 10-point visual analogue score with anchors from zero to 10 (completely confident or completely knowledgeable).

The authors conducted a prospective study among patients admitted for hip fracture rehabilitation at Parkwood Hospital. Both men and women who were admitted between three and seven days post-fracture for a three- to four-week length of stay rehabilitation program were enrolled between September 2001 and 2003. One hundred seventy-four patients (78 percent of whom were female) were identified with a mean age of 83 who were diagnosed and treated for a fracture of the hip during the study enrolment.
and followed for one year post-discharge. At the time of fracture, very few women and none of the men were taking any of the elements in the recommended treatment. Only seven participants had been given a bone mass density test, and these were all younger, more independent people. Fifty-seven physicians were identified as primary-care providers for the patient cohort. All physicians had received the clinical practices guidelines recommendations and completed the questions about their perception of their knowledge of osteoporosis management.

Six weeks after discharge from the rehabilitation program, all participants were still taking the residronate, but many had stopped taking calcium (36 percent) and vitamin D (28 percent). Twelve months later, less than half the patients (81 of 174) were taking residronate, 31 patients remained on vitamin D and only five patients were taking calcium despite regular appointments with primary-care physicians who had scored themselves high on knowledge and confidence. As expected, patients who continued the therapy had significantly higher bone mineral density than those who stopped the therapy.

Petrella and Jones offer three explanations for the under-treatment of osteoporosis. First, there seems to be a clinical disconnection between the physicians responsible for treating symptomatic fractures and the primary-care physicians responsible for ongoing management of the patient’s condition. They believe that any healthcare system that does not explicitly provide the means to link acute- and primary-care providers will be at risk for delivering sub-optimal osteoporosis care. Second, other studies show that doctors are hesitant to initiate or change a patient’s treatment, even in the face of a change in his or her condition. And third, patients may not recognize the importance of ongoing treatment and its compliance for chronic diseases.

The authors argue that publication of treatment recommendations and didactic dissemination of guidelines alone are insufficient to improve osteoporosis management. They recommend that innovative, multi-faceted interventions be developed and implemented in co-operation with the healthcare system, primary care, rehabilitation physicians and patients themselves.

Bibliographic Reference


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