



Family physicians and osteoporosis

Meeting the challenge

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It is difficult to ignore the growing importance of osteoporosis as a medical and social concern. We are presented with updated guidelines in national medical journals and numerous articles in peer-reviewed publications and continuing medical education journals.

Projections for the magnitude of the problem are sobering. By 2041 it is estimated that 25% of the population will be older than 65, and there will be a corresponding increase in the incidence of chronic illnesses and their sequelae. The classic clinical syndromes of frail elderly patients, the so-called “giants of geriatrics” (immobility, incontinence, falls, confusion), will be a growing part of family practice.

Osteoporosis and its associated fragility fractures, which are closely associated with immobility and falls, will present a substantial burden to individuals and society. Although women are more likely to be affected by osteoporosis, men too, are affected and account for up to 25% of osteoporosis-related hip fractures. For women there is a lifetime risk of 40% of suffering an osteoporosis-related fracture (13% for men) and a 23% risk of a hip fracture (11% for men). Associated with hip fractures is an increased mortality of 20% (32% for men) within the first year after a fracture. The estimated cost could rise to a staggering \$32.5 billion annually over the next 25 years, thus placing another heavy burden on our limited health care resources.

There is increasing awareness and interest in osteoporosis among the public and primary care physicians. Difficulty accessing endocrinologists, geriatricians, and internists is moving management of osteoporosis from specialists to family physicians. Are we ready to take on this task?

Taking the first step

In this issue of *Canadian Family Physician*, Jaglal et al (page 462) have taken a first step toward defining the needs of family physicians regarding preventing, assessing, and treating osteoporosis. Using a

qualitative focus-group study, they clearly illustrate the conundrum of family physicians faced with increasing demands for expertise and guidance in this area. Participants in their study felt unsure about the best way to determine fracture risk, to use diagnostic tools, and to treat the illness. Three main themes emerged from the study: clinical management issues, practice dilemmas related to disease prevention, and educational needs.

The physicians studied were unclear on indications for screening, testing frequency, treatment, and appropriate follow up. In addition, they felt that bone mineral density (BMD) reports were overly complex but lacked important information. Unlike many specialty reports received by family physicians, BMD reports contain a lot of technical data but not a clear clinical interpretation by radiologists. Family physicians are left with information that could be under-used or misinterpreted.

On the other hand, radiologists are often asked to interpret technical data based on sketchy clinical information. Bone mineral density reports could be made more useful if they were tailored more specifically to the clinical question being asked. This would require improved communication between ordering physicians and interpreting radiologists, perhaps by using more detailed referral forms and simpler, more focused reports of results.

Keeping ahead of the game

Keeping up-to-date with therapies for preventing and treating osteoporosis also presents a challenge for busy practitioners. Khan (page 441) presents an evidence-based update on osteoporosis therapy. The paper summarizes succinctly an approach to diagnosis of, clinical evaluation of, and intervention for osteoporosis. A main focus of the paper is a discussion of current pharmacologic treatments and the strength of evidence supporting their use. Bisphosphonates (etidronate, alendronate, risedronate) reduce the incidence of fractures, but they are

not equivalent in their ability to reduce hip fractures, the most clinically significant problem. Unfortunately, the more effective agents are not covered as first-line therapy under some provincial drug benefit plans. Physicians could be left having to prescribe potentially less effective therapy and wait for therapeutic failure (continued decline in BMD or fracture) before changing to another agent.

Hormone replacement therapy (HRT), also an effective treatment for preventing vertebral and hip fractures, has now come under closer scrutiny, as it appears to increase risk of breast cancer, coronary artery disease, and stroke. Although HRT is still recommended as first-line therapy for prevention in postmenopausal women with osteopenia and as second-line therapy for women with osteoporosis, prolonged use might lead to an unfavourable risk-benefit ratio. Khan also comments on the use of selective estrogen-receptor modulators, their extraskelatal benefits (reduced cardiac events and breast cancer), and their use in combination with bisphosphonates for patients at high risk of hip fractures.

Challenges in elderly patients

Elderly patients with multiple medical conditions and medications present yet another challenge for physicians trying to decide how to treat osteoporosis. Should they add another drug to an already long list? The answer will depend on many factors, including patients' functional status, risk of fracture, and life expectancy; but age alone should not determine treatment decisions. We could almost assume that most patients older than 70 have osteoporosis and should be considered for treatment, at least with vitamin D and calcium supplements, combined with exercise programs to optimize weight-bearing activities and balance. The latter therapies are often given short shrift in treatment recommendations, yet their benefit could be wide ranging.

The POWER Program¹ is an example of an innovative assessment and educational initiative that could have a significant effect on osteoporosis, falls, and fractures. In higher risk patients (previous fracture, frequent falls, family history) with reasonable functional abilities and life expectancy, treatment with bisphosphonates or selective estrogen-receptor modulators should be considered.

The physicians in the study by Jaglal et al identified time constraints and patients with complex medical issues as barriers to addressing prevention strategies. A hint of therapeutic nihilism appeared in comments about the elderly and prevention ("they don't want any more interventions," "they are not keen on health promotion" because they are

preoccupied with their illnesses). Again, we cannot treat patients based purely on chronological age. We do not stop antihypertensive or anticoagulation therapy just because someone reaches a certain age. Given the effectiveness of treatment for osteoporosis and the disastrous consequences of hip fractures, we need to temper our ageism and offer treatment where evidence suggests there will be benefit.

User-friendly guidelines

Despite the plethora of literature and guidelines on various clinical problems, important information often does not reach the front lines. This leads to confusion and less than optimal treatment of illness. In the study by Jaglal et al, family physicians were able to identify clearly their educational needs and specific questions about osteoporosis management. Interestingly, the answers to many of these questions were available in published papers and guidelines, prompting the authors to conclude that published information is not in a format easily used by family physicians. As a next step, they propose to use the information gathered in the current study to develop and apply educational interventions for family physicians.

Although guidelines have been criticized for being idealistic and not always applicable in the "real world," they serve an important purpose in documenting a clinical problem and providing the best evidence (to date) for management. Since the study by Jaglal et al was conducted, new evidence-based practice guidelines for diagnosing and managing osteoporosis have been published.² The 1996 clinical practice guidelines have been revised and expanded, and new recommendations based on an extensive and thorough literature search have been incorporated. The presentation of recommendations is clearer, and algorithms for screening, testing, and treatment have been added. Although they are a valuable resource for osteoporosis management, I suspect that most primary care practitioners will not use them.

A recent article³ in the *Canadian Medical Association Journal* summarizes important recommendations for using bone densitometry that were published earlier in the year in a less widely distributed clinical journal. This summary style of article is more practical for delivering relevant clinical information. Busy family practitioners need a user-friendly summary of guidelines and a perspective from the front lines. As one of the most widely read primary care journals, perhaps *Canadian Family Physician* would consider summarizing important guidelines in a practical format. This could promote wider dissemination of guidelines. We must strive, however,

not only to disseminate the information, but also to actively seek to integrate it into practice through multifaceted educational strategies. I look forward to further innovative strategies from such researchers as Jaglal and colleagues. ❁

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