nique — a rapid movement over which the patient has no control. Mobilizations are low-velocity techniques that can be performed in various parts of the available range based on the desired effect. Mobilization techniques have been shown to produce concurrent effects on pain, sympathetic nervous system activity, and motor activity.2-4 Mobilizations can be prevented by the patient⁵ and are generally considered far safer than manipulations. The majority of physiotherapists in Canada use mobilization techniques on the spine, as opposed to manipulation, while many have trained in both and are able to select the most appropriate technique for the patient's problem. It would be a shame if physicians eschewed this technique by misrepresenting Ernst's excellent commentary.

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[The author responds:]

The comments by Meena Sran and Karim Khan offer an important clarification. The risks of mobilization seems indeed to be much smaller than those of spinal manipulation, though truly convincing data are not presently available. I was interested to learn that

many Canadian physiotherapists have training in both methods and "select the most appropriate technique for the patient's problem." This begs the question of how the most appropriate technique is determined. A recent analysis1 of 64 previously unpublished cases of complications after upper spinal manipulations demonstrated that no factors are identifiable from the clinical history or physical examination of the patients that would help isolate patients at risk. Essentially, this means everyone is at risk. Spinal manipulation is undoubtedly the mainstay of chiropractors, and it is not surprising that the vast majority of complications happen in the hands of chiropractors.2 In my personal experience, physiotherapists in Europe use spinal manipulation less frequently and with more discrimination than chiropractors in Canada.

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Clinical practice guidelines: breast cancer pain

It is disturbing to read the 2001 update of the clinical practice guideline on the management of chronic pain in patients with breast cancer as summarized in *CMAJ* by Chris Emery and colleagues. In the full text of these guidelines the authors state that bone pain from vertebral metastases is very common; however, there is absolutely no mention of surgical stabilization techniques despite the fact that they are an effective evidence-based option for treating mechanical axial skeletal pain due to bone metastases.

Among their descriptions of treatment options the authors are careful to include descriptions of complementary techniques with little or no evidence for their effectiveness, including neurosurgical ablative procedures such as rhizotomy and cordotomy, and psychotherapy. They fail to mention the excellent outcomes seen with surgical stabilization of pathological vertebral fractures and impending fractures. They even state that "except for spinal cord compression, neurosurgical interventions are rarely required in the management of cancer pain." There is now a large body of literature that supports the surgical decompression and stabilization of spinal metastases as effective palliation of mechanical pain (not only for metastatic epidural spinal cord compression) with acceptable levels of morbidity.²⁻⁵ In fact, surgery followed by radiation appears to be more effective than radiation alone in improving local pain control and survival and reducing postoperative morbidity.2-6

No longer is it acceptable practice to deny surgical stabilization to appropriate patients with vertebral metastases. At the Combined Neurosurgical and Orthopaedic Spine Program at Vancouver General Hospital we have reported favourable outcomes in these surgically treated patients; we continue to follow their outcomes prospectively and are perfoming an economic evaluation of surgical treatment in these patients. It is a pity that the guidelines published by Emery and colleagues continue to perpetuate the lack of appropriate referral and access to effective spinal surgical care for this often inadequately palliated patient population.

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