Recommendations for management of low-back pain misleading

We have concerns regarding the article by Kennedy and Baerlocher,[1] in which they advise that most instances of low-back pain will resolve without treatment. A recent systematic review[2] showed that 65% of patients with acute low-back pain continue to report pain one year after onset, which suggests that optimal management of acute low-back pain requires chronic condition management strategies. The authors[1] recommend that most patients with acute low-back pain can be managed with analgesia and physiotherapy; however, recent evidence shows that stratified care is superior to a general approach.[3]

The authors[1] state that magnetic resonance imaging (MRI) should be obtained for patients who experience low-back pain for more than six weeks. This contradicts the guidelines put forth by the American College of Physicians.[4] Kennedy and Baerlocher[1] tout the potential benefits of load-bearing MRI as a more sensitive method of detecting degenerative changes in the spine. Degenerative changes in the spine are common in asymptomatic adults, and the more pressing issue in Canada appears to be the overuse of advanced imaging for low-back pain. A recent study in Alberta showed that only 44% of 1000 referrals for lumbar spine MRI were appropriate.[5]

The authors[1] promote vertebroplasty as an effective treatment for painful, acute vertebral compression fractures, and cite an open-label trial.[6] When vertebroplasty has been evaluated in randomized trials with a sham surgery control group, resulting in blinding of patients, no specific effect for vertebroplasty has been shown.[7]

The literature does not support the use of selective root block for low-back pain.[8] The authors[1] advocate the use of radiofrequency denervation or ablation for low-back pain with nerve-root involvement, and cite a trial[9] that showed no difference between radiofrequency denervation and intra-articular lumbar facet joint steroid injections for patients with chronic low-back pain. When compared with a sham surgical procedure, a number of trials have shown no specific effect associated with radiofrequency facet joint denervation for chronic low-back pain.[10]

Jason W. Busse DC PhD, Y. Raja Rampersaud MD, Lawrence M. White MD, Thomas E. Feasby MD
Assistant professor, Departments of Anesthesia and Clinical Epidemiology & Biostatistics (Busse), McMaster University, Hamilton, Ont.; Associate professor, Divisions of Orthopaedic and Neurosurgery (Rampersaud), University of Toronto, Toronto, Ont.; Professor, Department of Medical Imaging and Orthopedics (White), University of Toronto, Toronto, Ont.; Professor of neurology, Faculty of Medicine (Feasby), University of Calgary, Calgary, Alta.

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The authors respond

We appreciate the dialogue initiated by Busse and colleagues[1] surrounding the very complex and controversial field of low-back pain.

The definitions of pain resolution are critical. In the meta-analysis[2] referenced by Busse and colleagues[1] many of the included studies define resolution of pain as the complete absence of pain. Other studies define resolution of pain as a significant improvement that results in low levels of pain.[3,4] Chronic back pain is a serious concern and often does warrant long-term management strategies, as noted by Busse and colleagues.[1] Although back pain often resolves (improves significantly) without treatment, it frequently persists with substantially lesser severity.

In our article,[5] we refer only to analgesia, not to narcotics specifically. Analgesia, which includes nonsteroidal anti-inflammatory drugs, COX-2 inhibitors and acetaminophen, is most certainly a well-accepted and valid means to control chronic low-back pain. Busse and colleagues[1] warn against the use of narcotics. In the appropriate clinical circumstances, narcotic use is indeed also indicated.[6] Implying otherwise would be a great disservice to the large number of patients with intractable pain.

The American College of Radiology periodically releases appropriateness criteria for nearly every type of radiology exam, which describe the relevant indications for referral. These criteria include specific indications that warrant lumbar magnetic resonance imaging (MRI), one of which is pain that lasts more than six weeks. As Busse and colleagues[1] note, this specific criterion is discordant with the American College of Physicians' criteria for ordering lumbar MRI.[7] Guidelines can be discordant with one another. We agree that lumbar MRIs are frequently ordered inappropriately. Although inappropriate use of lumbar MRIs may not alter outcomes, MRI must be used for the appropriate indication of complicated back pain.

We make no reference to the utilization of lumbar MRI to indiscriminately screen patients with low-back pain as

Busse and colleagues[1] suggest. We do not recommend load-bearing MRI for clinical use in the investigation of low-back pain. We clearly state "evidence is insufficient to support widespread adoption."[5]

Busse and colleagues[1] refer to two randomized controlled trials that compare vertebroplasty to a sham procedure.[8,9] Both of these trials have been criticized as deeply flawed by many,[10] including an author of one of the trials.[11] The authors[1] ignore the larger and better designed VERTOS II trial,[12] consensus statements from the major societies and organizations representing those who actually perform the procedure, as well as the great preponderance of evidence in its favour.

Busse and colleagues[1] note the substantial controversy over the utility of selective nerve-root blocks and radiofrequency denervation for back pain. When evaluating the literature, one must be conscious of the significant heterogeneity that is inherent in terms of patient back-pain etiology. Interventional procedures likely will not be efficacious when indiscriminately applied to nonspecific back pain. Rather, a better understanding of the types of back pain may lead to the ability to selectively choose those who will benefit the most from particular procedures.

Sean A. Kennedy, Mark O. Baerlocher MD
School of Medicine (Kennedy), McMaster University, Hamilton, Ont.; Department of Radiology (Baerlocher), Royal Victoria Hospital, Barrie, Ont.

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Clarification of Borod's comments about Bill 52

Physicians may be reluctant to grant interviews about complex issues and concerned that their thoughts may be oversimplified or misrepresented. The *CMAJ* news article about Bill 52[1] is a case in point. I was pleased that the definition of palliative care was changed to be consistent with the World Health Organization definition, to clearly state that palliative care "neither hastens nor postpones death." It should follow from this that euthanasia is clearly not part of palliative care. I expressed concern that Bill 52 would create more barriers to referral to palliative care — not because of "increased paperwork" but because patients would be reluctant to see physicians who actively terminate patients' lives. I also expressed concern that although using the term "palliative sedation" as opposed to "terminal sedation" is important, reporting medical acts such as sedation may lead to a reluctance to implement this therapy. My comments were specific to the role of palliative care with regard to Bill 52. To be clear, I do not think that euthanasia or "aid in dying" has any place whatsoever in the practice of palliative care.

Manuel Borod MD
Director, Division of Supportive and Palliative Care, McGill University Health Centre, Montréal, Que.

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Post-tussive carotid artery dissection: Could it be whooping cough?

I thank Furlan and Sundaram[1] for their interesting case report on a patient who experienced a carotid artery dissection and subsequent Horner syndrome from coughing. I would like to remind clinicians that such a post-tussive injury should prompt consideration of pertussis as an underlying cause.

The cough caused by *Bordetella pertussis* infection is especially violent and can cause a variety of post-tussive injuries. Carotid artery dissection as a complication of pertussis has previously been reported.[2] Other potential symptoms and injuries secondary to pertussis include prolonged cough, seizures, syncope, encephalopathy, urinary incontinence, rib fracture, pneumothorax, inguinal hernia, subconjunctival hemorrhage, hearing loss and lumbar disc herniation.[2] In my emergency medicine practice, I have also seen pertussis cause vocal cord dysfunction, post-tussive vomiting and valsalva retinopathy.

The incidence of pertussis has been increasing since 1990.[3] We must remain vigilant for it in cases of unusual injury secondary to coughing.

Colleen Carey MD
Emergency physician, University of Calgary, Calgary, Alta.

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Unusual venous thrombosis

In a *CMAJ* practice article, Schattner[1] provides guidance regarding when to test for thrombophilia and when to screen for occult cancer in patients with unprovoked venous thromboembolism (VTE). This issue is important, because unprovoked VTE is common (about