

Waiting Lists for Lumbar Spine Referrals in Canada: What is the Solution?

Can. J. Neurol. Sci. 2010; 37: 719-720

In this issue of *The Journal*, Findlay and Deis¹ present an analysis of the “appropriateness” of lumbar spine referrals to a neurosurgical service. This is an important study because anyone who is seeing spine referrals in Canada knows that there is a serious struggle with waiting lists. At its core, this study raises important questions about the services referring physicians and patients expect of a spine surgeon and the services spine surgeons are prepared to offer.

In Canada, the wait time to see a spine surgeon is often longer than the wait time for surgery. The Canadian Spine Society (CSS) recently published preliminary data from its study of wait times across Canada.² First time patients were asked how long they waited to see the spine surgeon, how much information they were able to get about their condition and where they got the information. The response rate was quite variable across the country, and the numbers are still coming in. Most provinces had wait times between four and six months, while residents in Alberta and New Brunswick waited on average nine months. As bad as the results appear, the reality is actually worse: a second CSS study is looking at the number of spine surgeons who repeatedly close their practices when they become overrun with referrals, and the percentage of referrals that are judged as “inappropriate” and are therefore never seen.

Clinical criteria for the “appropriateness” of referrals are obviously somewhat controversial. Findlay and Deis¹ define an appropriate referral as “those that stated leg pain was the chief complaint, or those that described physical exam evidence of neurological deficit, and imaging reports (CT or MRI) were positive for nerve root compression.” This is a bit simplistic because it focuses solely on radiculopathy or neurogenic claudication. For example, a referral for mechanical back pain due to isthmic spondylolisthesis³ would potentially be “inappropriate” unless the patient had concomitant leg pain.

The limited evidence for surgery for the overwhelming majority of patients with mechanical pain is well noted.^{4,7} On the other hand, is it “inappropriate” to refer a patient who has had an adequate course of non-surgical therapy and is interested in a surgical opinion? Of course it is not, but this is where we get into the messy issue of expectations. Findlay and Deis¹ do not suggest that surgeons should refuse to see such patients, “but rather that the referring physician should be aware of the likelihood that surgery will not be offered and this should be discussed with the patient beforehand so that they have reasonable expectations for the clinic visit, wait time and outcome.” In other words, overwhelmed Canadian spine surgeons have two options: (1) refuse to see these referrals, or (2) make them wait a long time and hope they have little expectation that you can help them. This is what is happening in Canada today.

In their definition of an “appropriate” referral, Findlay and Deis¹ have included an MRI or CT scan. Many spine surgeons (me included) request an MRI or CT scan before a referral is considered. This is problematic because of the high false positive rate of these studies. A recent study reported that over 90% of MRI scans of the spine for back pain were abnormal.⁸ By requiring an MRI or CT before considering a consult, the surgeon actually encourages GPs to order imaging that may not have been “appropriate”.⁹ There are many other factors that lead to utilization of MRI for back pain. A significant portion of patients will have persistent or recurrent symptoms that drive the desire for further assessment. Faced with a long wait list to access a spine surgeon, a family physician may feel the need to reassure their patients or themselves they are not missing a potentially serious underlying diagnosis. Patients often feel there is “something wrong” with their spine and believe that MRI is the only way to get an answer. In interviews with Ontario family physicians, patient demand, fear of litigation and limited communication with the specialist were major factors affecting the ordering of MRI and CT scans.¹⁰ Although such imaging is inappropriate for most patients with low back pain, we all can appreciate that satisfying the patient’s demands is often easier than convincing them of what the evidence says.¹¹

Unfortunately, obtaining the MRI report may make things worse. Due to the high prevalence of structural abnormalities, the patient’s demand to seek a surgical “fix” becomes firmly established.

I agree with Findlay and Deis’s¹ underlying theme: armed with some clinical information and an MRI report, spine surgeons can effectively assess the likelihood of surgical candidacy (i.e., the “appropriateness” of the referral). However, if the patient is deemed “inappropriate” for assessment by the surgeon, or is put on a long waiting list, the referring physician still has to deal with knowledge gaps pertaining to the MRI results and the management of mechanical pain. By this time, patients with persistent symptoms have usually seen several health professionals, including physiotherapy, chiropractic, and pain management specialists. Sometimes, they will seek even more surgical opinions, and as the wait time lengthens, a sense of dissatisfaction grows. The CSS survey showed that in every province, less than 20% of patients waiting to be seen by a spine surgeon had learned all they wanted to know by the time of their appointment.²

The classification described by Findlay and Deis¹ is the product of the current state of waiting lists in Canada. Surgeons can triage their referrals using such methods, but it may not be ideal for patients, who are looking for a quality source of information about their problem. On the other hand, there simply

are not enough spine surgeons in Canada to assess all of the referrals.

In my opinion, the waiting list problem will not be solved by surgeon triage alone. Real solutions have to happen at primary care. Several guidelines for management of lower back pain have been published to help the primary care physician, but these have had little impact on practice patterns.¹²⁻¹³ There is some evidence that outcomes are better in specialized clinics where trained medical practitioners manage patients with evidence-based care.¹⁴

In Saskatchewan, the Ministry of Health approved the development of a spine care pathway, based largely on the success of clinical pathways for the hip and knee.¹⁵⁻¹⁶ The goal of the Saskatchewan Spine Pathway (SSP) is not only to improve access to the spine surgeon for patients who are likely to be surgical candidates, but also to enhance patient and referral physician education so that consistent information is provided and effective non-surgical therapies can be initiated earlier. The details of the pathway will be the subject of a coming publication. But in its essence, it requires physicians to classify symptoms based on five distinct pain patterns¹⁷ that can be easily determined by history and physical examination. There are pattern-specific treatment algorithms for the primary care doctor and patient to follow. If these measures fail, there is a standardized referral form for multidisciplinary SSP clinics in Saskatoon and Regina. These centers will triage patients to (1) further non-surgical therapy, (2) MRI/CT, and/or (3) referral to the spine surgeon. Compliance may be facilitated by the creation of special fee codes for physicians that have completed the SSP course and use standardized SSP assessment tools and treatment algorithms.

The article by Findlay and Deis¹ raises important issues about patient and referral physician expectations. There is certainly a problem with the system when almost half the referrals to overburdened surgeons are “inappropriate” for surgery. These patients may not need surgery, but they need access to care that is timely, effective and evidence-based. As spine surgeons, we need to advocate for tools and resources that will help primary care doctors and spine surgeons achieve this goal.

*Daryl R. Fourney
Saskatoon, Saskatchewan, Canada*

REFERENCES

1. Findlay JM, Deis N. Appropriateness of lumbar spine referrals to a neurosurgical service. *Can J Neurol Sci.* 2010;37(6):843-8.
2. Hall H. Still Waiting. *Spinal Columns.* 2010;10(1):9.
3. Agabegi SS, Fischgrund JS. Contemporary management of isthmic spondylolisthesis: pediatric and adult. *Spine J.* 2010;10(6):530-43.
4. Brox JI, Reikerås O, Nygaard Ø, et al. Lumbar instrumented fusion compared with cognitive intervention and exercises in patients with chronic back pain after previous surgery for disc herniation: a prospective randomized controlled study. *Pain.* 2006;122(1-2):145-55.
5. Gibson JNA, Waddell G. Surgery for degenerative lumbar spondylosis: updated Cochrane Review. *Spine.* 2005;30(20):2312-20.
6. Mirza SK, Deyo RA. Systematic review of randomized trials comparing lumbar fusion surgery to nonoperative care for treatment of chronic back pain. *Spine.* 2007;32(7):816-23.
7. Schafer J, O'Connor D, Feinglass S, Salive M. Medicare Evidence Development and Coverage Advisory Committee Meeting on lumbar fusion surgery for treatment of chronic back pain from degenerative disc disease. *Spine.* 2007;Oct 15;32(22):2403-4.
8. You JJ, Purdy I, Rothwell DM, et al. Indications for and results of outpatient computed tomography and magnetic resonance imaging in Ontario. *Can Assoc Radiol J.* 2008;59(3):135-43.
9. Lehnert BE, Bree RL. Analysis of appropriateness of outpatient CT and MRI referred from primary care clinics at an academic medical center: how critical is the need for improved decision support? *J Am Coll Radiol.* 2010;7(3):192-7.
10. You JJ, Levinson W, Laupacis A. Attitudes of family physicians, specialists and radiologists about the use of computed tomography and magnetic resonance imaging in Ontario. *Healthcare Policy.* 2009;5(1):54-65.
11. Chou R, Fu R, Carrino JA, et al. Imaging strategies for low-back pain: systematic review and meta-analysis. *Lancet.* 2009;373:463-72.
12. Bishop PB, Wing PC. Knowledge transfer in family physicians managing patients with acute low back pain: a prospective randomized control trial. *Spine J.* 2006;6(3):282-8.
13. Bishop PB, Wing PC. Compliance with clinical practice guidelines in family physicians managing worker's compensation board patients with acute lower back pain. *Spine J.* 2003;3(6):442-50.
14. McGuirk B, King W, Govind J, et al. Safety, efficacy, and cost effectiveness of evidence-based guidelines for the management of acute low back pain in primary care. *Spine.* 2001;26:2615-22.
15. Gooch KL, Smith D, Wasylak T, et al. The Alberta Hip and Knee Replacement Project: a model for health technology assessment based on comparative effectiveness of clinical pathways. *Int J Technol Assess Health Care.* 2009;25(2):113-23.
16. Barbieri A, Vanhaecht K, Van Herck P, et al. Effects of clinical pathways in the joint replacement: a meta-analysis. *BMC Med.* 2009;7:32.
17. Hall H, McIntosh G, Boyle C. Effectiveness of a low back pain classification system. *Spine J.* 2009;9(8):648-57.