



# BACK HEALTH

## GLA:D<sup>®</sup> Back

### ABSTRACT

While low back pain is one of the most common clinical conditions seen in a family physician's office, there remains a lack of low or no cost initial treatment options that are concordant with recognized best practice guidelines. As a result, many patients are offered investigations and treatments that have limited value and/or significant risks but are readily available through publicly funded provincial health care systems. GLA:D<sup>®</sup> Back builds upon the successful GLA:D model (initially developed for hip and knee osteoarthritis patients) by using the same established methodology to deliver a patient education and targeted rehabilitation program for low back pain.

**KEYWORDS:** low back pain; best practice; guidelines; education; rehabilitation



CME

Pre-test Quiz



### Introduction

Low back pain remains among the most common clinical conditions seen in a family physician's office. Despite well understood clinical practice guidelines, actual clinical management remains challenging due to the disconnect between recommended treatments and those that are readily available through publicly funded provincial health care systems.<sup>1,2</sup>

The result can be an overuse of expensive diagnostic imaging services such as Magnetic Resonance Imaging and the use of easily accessible but potentially risky interventional approaches that are not well validated in the medical literature.<sup>3,4</sup> Many patients end up on chronic opioid therapy, which carries its own risks, simply because of a lack of alternatives.<sup>5</sup>

### Patient One: Donald

Donald is a 46-year-old seasonal worker who is well known to his physician. He has a long-standing history of recurrent low back pain that flares every summer when he resumes



**Brandyn Powelske, PhD Candidate,**  
Faculty of Rehabilitation Medicine,  
Department of Physical Therapy,  
University of Alberta



**Greg Kawchuk, Professor,** Faculty of  
Rehabilitation Medicine, Department of  
Physical Therapy, University of Alberta



**Ted Findlay, Medical Staff,** Calgary  
Chronic Pain Centre at Alberta Health  
Services, Calgary, Alberta



his work for a landscaping company and improves again over the winter when he is not working. He will be returning to work in another two weeks and is looking for pain medication he can take as needed. His low back pain is not well localized but is above the beltline, worse on the right side. There are no radicular features described on history nor found on physical examination; he has no other significant medical history or risk factors for malignancy, trauma, infection or inflammatory joint disease. Physiotherapy has been previously recommended, but he does not have a private insurance plan or financial resources to make that possible. NSAID's have not been tolerated due to gastrointestinal side effects that persist even with cytoprotective medications.

An MRI showed degenerative disc disease at several levels, a bulging disc at the L4/5 level and foraminal stenosis suggesting a degree of potential L5 nerve root impingement at this level.

After reviewing his options, Donald and his physician agreed on a transforaminal epidural steroid injection on the right side at the L5 nerve root. If unsuccessful, then he will get a trial of oxycodone with acetaminophen (5/325mg) up to four times a day as needed during the upcoming work season.

### Case Discussion:

Over many years, treatment recommendations for low back pain have

consistently emphasized patient education and exercise or rehabilitation programs as the mainstay of care. The PEER group at the University of Alberta repeated and reinforced these recommendations in their recent chronic pain guidelines published in the College of Family Physicians of Canada Journal.<sup>6</sup> Nonetheless, organized patient education for low back pain is still not readily available and many patients have prohibitive cost barriers to accessing rehabilitation or exercise programs.

The result can be a frustrating and often futile search for treatment modalities that are covered by the public health care system, which, unfortunately, can lead to trials of interventional injection therapies suggested only by imaging results. As a final step, many patients end up placed on chronic opioid therapy because of a lack of reasonably accessible alternatives.

Ignoring the Choosing Wisely Canada recommendations, MRI evaluations of low back pain in the absence of clinical indications remains an overused practice. MRI should only be performed to investigate or confirm an established clinical diagnosis or when an intervention is being considered for which those images are required.<sup>7</sup> It is very common to find degenerative disc disease listed on radiologist reports; 52% of 30 year old asymptomatic adults have imaging suggesting degener-



ated discs.<sup>8</sup> Using this potentially unrelated finding as an explanation for the patient's pain may create an negative expectation that the pain cannot improve and will worsen with time.

The recent CFP guidelines emphasize that there is limited evidence for the use of epidural steroid injections. In Donald's case, practice guidelines discourage injections in the absence of radicular findings.<sup>1,2</sup>

While commonly used, there is a significant risk of medication abuse and addiction associated with opioid therapy for chronic low back pain. The 2016 Drug Safety Bulletin of the Institute for Safe Medical Practices (Canada) clearly note that these narcotics are not indicated in the management of fibromyalgia, low back pain or headache.<sup>9</sup>

## GLA:D® Back

### *Origins of GLA:D® and GLA:D® Back*

Low back pain remains a major source of disability and reason for seeking medical attention.<sup>10,11</sup> While guidelines recommend education and exercise, lack of access and inadequate reimbursement force physicians to make other suboptimal choices.<sup>1,12,15,16,21</sup> In 2018, Danish researchers developed the GLA:D Back program to address the gap between available treatment and clinical practice. The intention was to give physicians and their patients access to

evidence-based care for chronic low back pain.

### *The program*

Although the acronym does not fit low back pain, the program is based on principles of self-management used to develop the GLA:D program (Good Life with Osteoarthritis in Denmark) for knee and hip pain patients. The GLA:D Back program follows the Danish National Board of Health's clinical guideline recommendations for treating low back pain and consists of three components, all designed to improve patient self-efficacy:

- EDUCATION of clinicians to conduct GLA:D BACK
- INTERVENTION consisting of group-based education and exercise programs
- REGISTRATION of patient data in the GLA:D registry.

The GLA:D Back program is designed for patients with chronic (persistent or recurring) low back pain. The program consists of a baseline evaluation then structured group sessions focused on education and exercise. The group classes consist of two, one-hour education sessions and an 8-week exercise regimen (2x/week). Each group has between 4 and 14 people depending on the delivery method (in-person or telehealth), the available facilities and the preference of the instructor. At the end of these sessions, an individual assessment



is completed and all data from the program are registered in the GLA:D Back database.

### **Research to date**

To date, GLA:D Back has enrolled more than 800 clinicians and 1,000 patients in Denmark.<sup>22</sup> Numerous publications have described the structure, implementation and effectiveness.<sup>23,24,25,26</sup> Alberta successfully translated and piloted the program in 2019. It was quickly adopted by both clinicians and patients.<sup>27</sup> Of the participating clinics, 79% (15 of 19) offered GLA:D Back to their patients, enrolling 78 patients who attended the final assessment. As an additional benefit, the clinicians exhibited increased confidence in treating back pain patients, emphasizing both biomedical and behavioural strategies.

Since 2019, the Alberta GLA:D Back program has trained 90 clinicians. The program is being trialed as part of the Alberta Back Care pathway (ABCp), which seeks to provide primary care physicians with evidence-based, low-cost options for both acute and chronic low back pain patients.

### **Remote access to GLA:D Back during the pandemic**

When the pandemic reduced or eliminated direct contact between patients and clinicians in Alberta, the GLA:D Back program transitioned from in-person clinician and patient training to Zoom video conference delivery systems. Clinicians interested in becoming

certified attended a weekend virtual course including background content and examples of patient examination and evaluation. Clinicians interacted with course instructors as they would during an in-person session and used virtual breakout rooms for small group discussion or one-on-one instruction. Clinicians were able to deliver the program to patients via Zoom both locally and for distant learning while incorporating specially designed assessment tools.

### **Patient Two: Susan**

Susan is a 34-year-old female regular patient of her family physician. Susan is generally healthy but reports low back pain beginning in the second trimester of her recent pregnancy that failed to resolve as expected. She is now 12 months post childbirth, asking for treatment options. She has no risk factors for malignancy, trauma, infection or inflammation. The physical examination shows only right sided low back pain that is provoked with a flexion and rotation maneuver. Since she is still breast-feeding Susan does not wish to take any medications.

Susan's family physician is a member of an Alberta based Primary Care Network team who have funding to provide GLA:D Back group education and rehabilitation programs to their patients. They decided to start the program after seeing the success of the GLA:D program for hip and knee osteoarthritis.

After successfully completing the





program, Susan was able to manage her low back pain and no longer considered it a significant problem. She anticipates a return to full duties in her career as an office manager at the end of her maternity leave.

## Conclusion:

GLA:D Back is a systematic and validated approach to providing patient education and structured rehabilitation consistently recommended as the mainstay of management for low back pain by practice societies and guidelines. GLA:D Back builds on the demonstrated success of and patient satisfaction with the program developed for hip and knee osteoarthritis. GLA:D Back can be instituted in a variety of clinical settings including community rehabilitation, primary care offices, publicly funded outpatient clinical settings and virtually.<sup>28</sup>

As GLA:D Back becomes more widely available in Canada, ongoing evaluation of clinical outcomes and patient satisfaction should lead to continued improvements in patient selection and integration into established clinical pathways.

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## SUMMARY OF KEY POINTS

1. Low Back Pain remains one of the most seen conditions in a family medical practice, and chronic low back pain the leading cause of ongoing disability
2. There are significant patient financial and access barriers to treatment modalities most consistently recommended in practice guidelines: education and activity/rehabilitation-based therapies.
3. GLA:D Back presents a validated option that can help close the gap between recommended treatments for low back pain and access through a primary care practice.
4. GLA:D Back is an extension of the well-recognized and widely used GLA:D program for hip and knee osteoarthritis.



CME

### Post-test Quiz

Members of the College of Family Physicians of Canada may claim MAINPRO-M2 Credits for this unaccredited educational program.

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## CLINICAL PEARLS

In the absence of clinical "Red Flags", avoid ordering unnecessary imaging when the results are not needed for investigating an established clinical diagnosis or to initiate a therapeutic procedure.

When considering pharmacotherapeutic options, remember that the Institute for Safe Medical Practices (Canada Institute for Safe Medication Practices Canada) notes that opioids should generally be avoided in the treatment of low back pain, headache and fibromyalgia.

The Covid-19 Pandemic has taught us that many group based education and rehabilitation-based programs can be effectively delivered in a virtual format.

