

Controversy surrounds new treatment for discogenic back pain

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My back hurts Doc. It's one of the most common complaints heard by family doctors. Various estimates have suggested that 80% of people will experience at least one episode of back pain over their lifetimes.

Traditional treatments of discogenic back pain have ranged from conservative management with oral analgesics and muscle relaxants, to manipulation by means of physical therapy, exercise, transcutaneous electrical nerve stimulation and traction, to the more invasive, including epidural injections, intradiscal thermocoagulation, and surgical spinal decompression involving the removal of disc fragments and/or spinal fusion. But to date, reproducible effective treatments for back pain have been elusive.

A recently developed treatment, called nonsurgical spinal decompression, is now being heavily marketed as a cure-all for discogenic causes of low back pain. But it has been the subject of lawsuits and legal settlements in the United States and the target of investigatory media shows, pointing to a clear need for the development of robust methodologies designed to determine the safety and efficacy of the therapy.

Nonsurgical spinal decompression involves the use of motorized traction of variable force, and in some cases, variable angles of pull. It is delivered by specialized tables where the variable traction is designed to overcome the spine's paravertebral muscles' proprioceptive contractile response to linear traction — leading to a greater widening of intervertebral spaces. That, proponents say, reduces disc protrusions and, in turn, allows for healing.

The treatment is generally provided by chiropractors, often requiring dozens of sessions, with costs running into the thousands of dollars.



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A chiropractic skeleton.

The ultimate cost is, in part, predicated on what type of treatment table is used in the procedure. Among the more expensive options are those designed by Tampa, Florida-based Axiom Worldwide Incorporated, whose tables cost about US\$100 000.

Claims made by Axiom regarding the efficacy of one of their tables, the DRX9000, in the treatment of discogenic back pain have been the subject of lawsuits in Florida, Oregon and California.

According to settlements reached in Oregon and California, the claim that the DRX9000 had an 86% success rate for the treatment of degenerative disc disease, disc herniations, sciatica and postsurgical pain is not substantiated. The case filed in Florida is ongoing.

Marketing efforts in Canada for this new form of therapy appear to be intensifying, with full-page advertisements having run recently in newspapers stating that “this revolutionary treatment procedure has consistently achieved

success rates between 80%–90% ... and the results are long lasting.” The ads assert that “the end result is a natural and long term elimination of chronic pain using a method that is safe, comfortable and effective.”

Among those providing nonsurgical spinal decompression is The Low Back Clinic, which have five Ontario, one Nova Scotia and one Manitoba outlets that utilize Axiom's DRX9000.

Advertisements that the Low Back Clinic ran in *CMAJ* claimed that “if true non-surgical spinal decompression therapy is applied to suitable candidates early, long and costly surgical procedures and recovery periods can often be avoided.”

Meanwhile, an information package designed for physicians, distributed by The Low Back Clinic and obtained by *CMAJ* contains the very claim found in the Oregon and California cases to have been unsubstantiated, to wit: “In fact, our treatments have a proven 86% success rate.”

The claims caught the eye of the Canadian Broadcasting Corporation's investigative journalism show *Marketplace*. It profiled nonsurgical spinal decompression, The Low Back Clinic and the DRX9000 in its Mar. 26 episode, which included a segment using hidden cameras that appeared to suggest that, at one Low Back Clinic office, a prospective patient was not physically examined prior to being recommended treatment.

Dr. Richard Liem, chiropractor and founder of the Low Back Clinic, says the *Marketplace* piece was “a one-sided skewed news report” that “trivialized everything that we do.”

Liem says that Axiom's legal battles stemming from the 86% success rate claim have had to do with the “erroneous” nature of the first DRX9000 study conducted by the firm.

In more recent studies, success rates have actually been 88% and “every study afterwards has been legit,” Liem says.

Liem also says that the clinic is highly selective with respect to patients. “We do not accept everyone who walks into the clinic. You can’t; it’s impossible because again we have to make sure that the patient has what we treat.”

“An examination has to be performed in order to isolate or find out where the symptoms are stemming from,” Liem says. He offered a number of possible explanations as to why the hidden camera patient was not examined. The first possibility was because the doctor was following “association guidelines” which prohibit examinations in conjunction with free consultations, guidelines he adds that have recently been subject to change.

According to the Chiropractic College of Ontario’s website, advertising guidelines governing free consultations (www.cco.on.ca/site_documents/G-016%20Advertising.pdf) were last revised on Sept. 24, 2009. They do not prohibit a physical examination. Liem says he

was unaware of whether or not the doctor had seen the revisions, which occurred some five months prior to the recording of the *Marketplace* segment.

Another possibility, Liem says, was that the patient did not come in seeking an examination, but rather information as to whether or not the treatment would be appropriate. “In this case the consult wanted to know if he was a candidate or a potential candidate.” But Liem agreed that regardless of the discussion that occurred, “an examination still has to be performed.”

Chiropractor and nonsurgical spinal decompression proponent Dr. Joseph Lawrence says he cringed at the *Marketplace* piece.

“Decompression isn’t just a table; it’s a broader range of techniques,” he says, adding that, as with many physical treatment modalities, “the magic is not in the machine at all, it’s the practitioner’s use of them.” That fact was missed by the CBC, Lawrence says.

Lawrence says that while the medical literature is sparse, to date the two peer-reviewed meta-analyses of nonsurgical spinal decompression have concluded that the available evidence is insufficient in both quantity and quality to draw any evidence-based conclusions as to the therapy’s efficacy or lack thereof when compared with other nonsurgical treatment options. He adds that the studies evaluated by the meta-analyses were conducted “prior to the information on how to codify a patient properly” and consequently included patients who likely would not have benefited from nonsurgical spinal decompression.

Were such patients properly excluded, Lawrence says, nonsurgical spinal decompression, would have been shown to be superior to more traditional nonsurgical options. — Yoni Freedhoff MD, Ottawa, Ont.

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