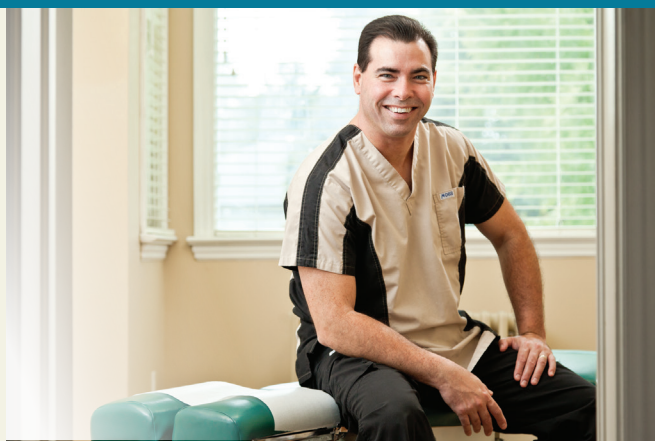
# SHARE THE CARE FOR BETTER PATIENT OUTCOMES

Back pain is the leading cause of disability in Canada,[1] and many Canadians with low back pain self-refer to chiropractic care. When low back pain presents with additional symptoms, it takes a careful examination and assessment to identify the source of the problem and rule out any potential risks to the patient.

Darcy Driscoll, MSc, DC, a chiropractor in Thorold, Ontario, discussed a recent case.



## Presentation

Anita is a 58-year-old receptionist in a busy legal practice who presented with a gradual onset of increasing pain in her right leg.

She had a history of pain in her neck, back, shoulders and arms. She is a non-smoker with no history of trauma or injury; osteoarthritis of the knee had been diagnosed in 2016. The recent onset of leg pain, and concerns of it potentially being related to her long-standing low back pain, prompted her visit.

Anita described feeling pain from the back of her right knee to her foot, and said the pain in her leg was sometimes accompanied by back pain. She said that walking aggravated her leg pain, which could be relieved with rest.

***"I went to Dr. Driscoll because I had pain in my leg. I had had low back pain for years, but when I started experiencing leg pain as well, friends said it might be sciatica and suggested I see a chiropractor."***
— Anita Azzarello

## Clinical findings

On examination, range-of-motion testing showed that 45 degrees of flexion through Anita's thoracolumbar spine reproduced the pain in her right low back and right lower leg, suggesting there might be a connection. Extension also reproduced the right low back pain. Left lateral flexion to 35 degrees caused some discomfort in her right lower back, while right lateral flexion was limited to 30 degrees and caused discomfort on the left side. Her patellar and Achilles reflexes were normal.

Seated straight-leg raise caused some discomfort in her right calf but not the left, and Lindner's sign was absent. Heel and toe walking was difficult on the right. Homan's sign was present with the right calf, but there was no redness or heat. Her difficulty in walking might have been related to the calf pain—which could have been caused by a strain—or to some spinal stenosis.

She had some palpatory tenderness of the facet joints from L1 to L4 with posterior-to-anterior pressure. While that correlated with her back pain, it didn't elicit any leg pain.

To further evaluate the structure of her spine, I sent Anita for X-rays of her lower back and we made an appointment for followup in one week. If the leg pain developed while walking, I instructed her to flex forward from her lower back, which may help relieve her pain.

## Further assessment

Anita returned one week later with severe leg pain.

***"At my second visit, the pain was so extreme I was on the verge of tears. I couldn't walk and I just didn't know what was happening."***

The radiology report indicated mild degenerative change in the lumbar spine without any significant disc narrowing. The X-ray combined with the physical examination suggested her leg pain was probably not related to her low back pain.

Since Anita's leg pain could be related to restricted blood flow, I urged her to contact her family physician immediately to rule out a deep vein thrombosis (DVT).

## Followup

I faxed a consultation note to Anita's family physician, explaining the findings and my concerns about a possible DVT. I asked him to examine her and determine if an ultrasound or blood tests were appropriate. Although her physician was away on vacation, his office staff arranged for her to have an ultrasound at the local hospital.

## Diagnosis

Duplex ultrasound of the femoral veins showed normal compression and normal blood flow, thus there was no evidence of a DVT. Doppler ultrasound showed a dense calcified plaque causing stenosis of the popliteal artery and decreased peak systolic velocities involving the popliteal artery, as well as the posterior tibial and dorsalis pedis arteries.

Calcified plaque was the cause of her leg pain—which was not related to her back pain after all.

***"The hospital referred me to a vascular surgeon while I was there for the ultrasound. They explained that I have plaque in my leg and I thought—I don't smoke, I'm not diabetic, I don't have high cholesterol."***

## Management

Anita was referred to a vascular surgeon who managed the plaque conservatively, with low-dose ASA and increased exercise.

Knowing there was no risk of DVT, I could address the issues within my scope as a chiropractor, focusing on her low back, shoulder and neck pain. Managing Anita's pain has helped her mobility and activity levels, which, in turn, will improve her overall health. Anita's case is an example of how chiropractors can be an essential part of a patient's healthcare team by working collaboratively to help get to the bottom of the pain and help manage it.

***"My vascular surgeon prescribed 81 mg of ASA daily and a healthy lifestyle, including lots of walking. My circulation has improved so much that my appointments have been switched from every three months to every six months and, if all is well at my next appointment, I can move to yearly appointments. So that's where I am today and I'm grateful that Dr. Driscoll advised me to go to my doctor right away."***

Ontario Chiropractic Association

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WWW.CHIROPRACTIC.ON.CA

REFERENCE: 1. Institute for Health Metrics and Evaluation. Canada: What health problems cause the most disability? www.healthdata.org/canada (accessed May 29, 2019).