

# Sciatica

## Oh, my aching back



Philip Holden

**J**oelle Brassard, 45, a manager at an IT company in Quebec City, remembers precisely the moment she was introduced to the agonizing back pain known by the umbrella term sciatica.

She was sitting in yet another long, tense corporate meeting at a very stressful job she was quickly learning to loathe. As she turned to get out of her chair, she was unable to straighten to a full standing position. Her lower back felt as if it was caught in a vice, and any attempt to stand upright resulted in sharp, stabbing pain.

She left the meeting stuck in a bent-over position, forced to watch her feet as she slowly and painfully made her way back to her office. "It was humiliating and defeating all at the same time," she recalls.

Joelle had to take six weeks off from work to rest and recover. Eventually, with the help of OTC pain medications, she was able to begin physiotherapy exercises and a gentle swimming routine. After two

months, Joelle was able to return to more of the activities she loved, including driving her car. But even that had to change. The effort to depress the clutch resulted in excruciating pain that ran from her lower back, down her left buttock and into the back of her left leg, right to the sole of her left foot. So she traded in her sporty, five-speed Corolla for another model with an automatic transmission.

Hello, sciatica. Goodbye pain-free mobility.

#### WHAT IS SCIATICA, ANYWAY?

"Sciatica is not itself a condition; it's a set of symptoms," says Dr. Yoga Raja Rampersaud, a spine surgeon in the division of orthopaedic surgery at Toronto Western Hospital. To understand sciatica, you have to get acquainted with the anatomy of the lower spine, home of the

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sciatic nerve. One of the largest nerves in the body, it's formed from several of the lower spinal nerves and runs around the back of the hip joint and extends all the way down the back of the thigh. It supplies sensory capacity and motor function to the skin and muscles of the back of the thigh and most of the leg and foot. And while you might think it affects one gender more than another, it's pretty much evenly distributed between men and women. It's more an age and lifestyle thing (see "Prevalence," following).

Most commonly, sciatica results when a spinal disc ruptures in the lower lumbosacral region of the spine. Instead of acting as a gelatinous cushion between the bony vertebrae of the spine, the disc squeezes out from between the vertebrae and presses on one or more of the spinal nerves that form the sciatic nerve, causing inflammation.

## SYMPTOMS

When this happens, you may feel a shooting pain down your buttock and into the back of one of your thighs, your calf or even the sole of your foot — with or without actual back pain. It almost always involves unilateral pain, one leg or the other. You may also have sensations of burning, numbness or tingling. Sometimes, pain radiating around the hip or buttock can feel like a hip problem. "Symptoms can range from very mild and tolerable to completely intolerable, and you can't get out of bed, never mind work or otherwise function," says Rampersaud, who has first-hand knowledge of this.

"Sciatica symptoms may come on slowly," explains Dr. Don Nixdorf, executive director of the College of Chiropractors of BC and the BC Chiropractic Association. When back stiffness and lack of flexibility, such as when you get into or out of a chair or car, are left untreated for as little as two or three weeks, says Nixdorf, symptoms can increase in severity until the sciatic nerve becomes very, *very* angry.

## PREVALENCE

"At some point in their lives, about 80% of Canadians will experience some form of back pain," says Rampersaud, but not sciatica since true sciatica is much less common than low-back pain. Back pain is second in incidence to headache in the general population and is usually due to wear-and-tear injury in the spine. "It's just everyday life," he notes.

Although anyone can develop symptoms of sciatica, it is very uncommon in young people under age 30 or in people older than 65. Most commonly, say experts, sciatica is found in people between the ages of 30 and 50, about equally in men and women. Depending on the definition, true sciatica strikes 1% to 40%.

## WHO'S AT PARTICULAR RISK?

Interestingly, people who sit for a living are at slightly higher risk of back-related problems than people who are physical workers in forestry, mining, farming or construction, according to Nixdorf. "You would think that people in heavy industry might be predisposed to having more frequent back and sciatica-related symptoms," says Nixdorf. "Not necessarily so." Slumping at a desk or a computer for eight hours a day, five days a week, can aggravate compression of the spine, which, in turn, can lead to lower-back stiffness, back pain and inflammation of the sciatic nerve.

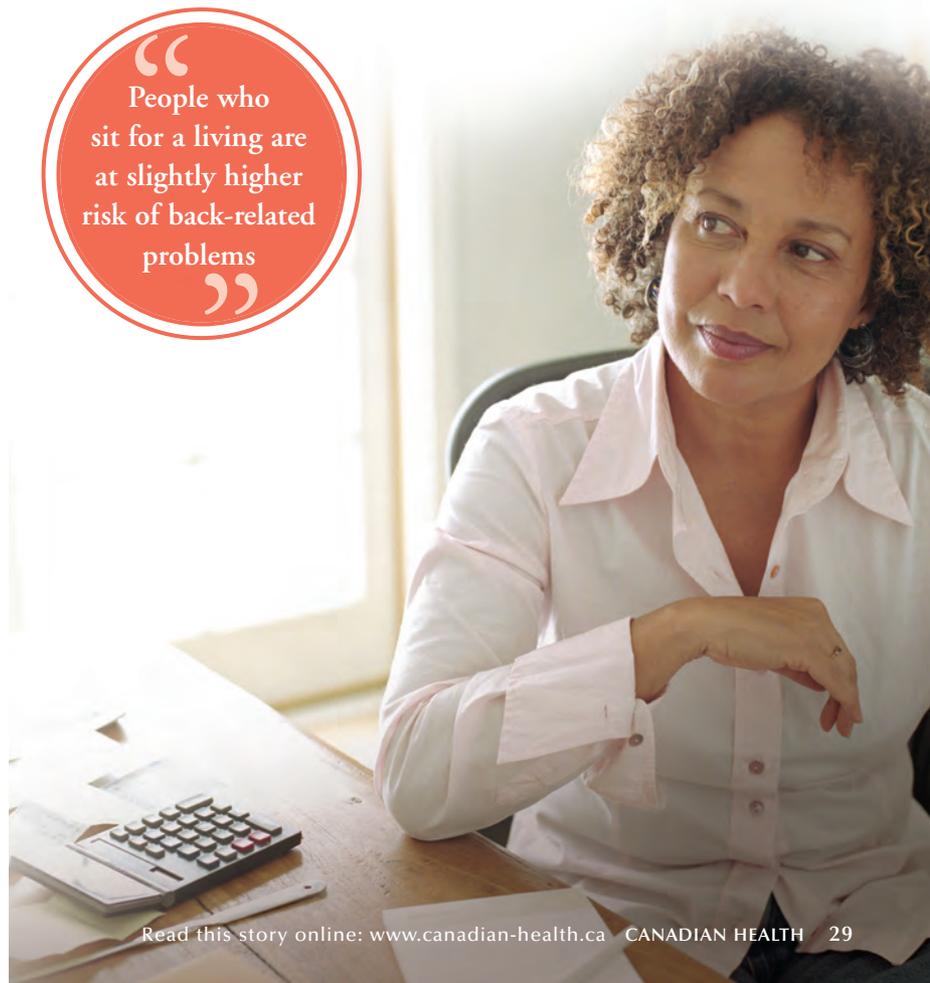
## MANAGEMENT

The good news is that even though sciatica can be extremely painful and disabling, most sufferers do get better with conservative therapy: time, pain management and modified activities of daily living. Those with chronic sciatica may get some relief from using a kneeling desk chair, which takes upper-body weight off of the lower back. "Sleeping in a Z position may help as well," says Rampersaud.

The bottom line is that you have to keep trying different ways to ease the inflammation and pain. Your doctor or chiropractor can help.

According to Rampersaud, 50% of people with sciatica improve in

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## DIAGNOSIS

Your physician or chiropractor will conduct a thorough medical history and physical examination.

If needed, an X-ray can spot misalignment or fractures of the bony spine, but a CT scan may be necessary to confirm tissue damage such as injured muscles and ligaments or bulging discs.

## Piriformis Syndrome

Piriformis syndrome, which can also cause sciatica symptoms, results when the sciatic nerve is compressed not by a bulging disc but by the piriformis, a muscle located deep in the buttocks. The muscle runs from the base of the spine along the outside crease of the buttocks and attaches to the thigh bones, allowing you to rotate your thighs outward. Repetitive exercises, such as running or using a stepping machine, can cause piriformis syndrome.

Anne Welbourne, 55, a paralegal in Toronto, can attest to this. "I do ballet exercises as part of my fitness routine," says Anne. "One ambitious day, I did 20 *ronds de jambe* on each side instead of my usual eight." The *rond* is a ballet exercise in which the hip and buttock are rotated forcefully outward while the leg makes circles in the air. Anne's sciatic nerve was not happy. Over the next few days, she developed sharp pains in her left buttock and down the outside of her left thigh, all the way to her ankle, with occasional tingling. "I couldn't put in my usual long hours at my desk," she says.

The symptoms took more than two months to resolve but eventually responded to rest, cold packs and heat, as well as non-steroidal anti-inflammatory drugs. And definitely no more *ronds*.

Postural issues resulting from driving a car for prolonged periods of time (with your foot on the accelerator) or a shift in your centre of gravity (such as during the third trimester of pregnancy) can also cause inflammation of the piriformis.

Treatments include stretching exercises, physiotherapy, anti-inflammatory medications and pain medications. With persistent symptoms, further treatment can entail local injection of anaesthetic and cortisone medication.

two or three months —some even in a few days or weeks — 80% in three to six months; and 80% to 90% in 12 months. Very rarely is surgery needed to remove the ruptured part of the disc or to create more space around the sciatic nerve in the spine.

Now for the even better news: in the majority of people, sciatica can be prevented. The key, say Rampersaud and Nixdorf, is to stay active and perform exercises that specifically strengthen the spine-supporting abdominal (or core) muscles to relieve strain on the lower back.

Although it took Joelle a full three months to recover from sciatica, she's taken that advice to heart. "I never want to feel like that again," she says, remembering the long nights of pain and the mornings of agony when it took her more than an hour to "warm up" her back so she could get dressed.

Now she exercises four or five times a week to combat stress and has lost 15 pounds. The addition of yoga to her swimming and cycling activities has improved her flexibility and toned her torso, strengthening the core muscles supporting her spine and making them more flexible. That allows her to twist, bend and stretch without putting her lower back at risk. She is also careful not to sit for long periods of time, either at a computer or in the car. Instead, she takes breaks to walk around and do some simple stretching.