

Low Back Pain

March 2017 - Tricia Hayton, Registered Physiotherapist

According to Statistics Canada 4 out of 5 people will suffer low back pain in their lifetime, and usually between the ages of 30 to 50. Approximately 85 to 90 percent of the time there is no known cause, although contributing factors include poor muscle tone of the back and abdomen, obesity, smoking, poor posture, and most often improper lifting techniques. This epidemic is costly to the Canadian health care system, and the patient as it often affects their ability to work. It is by far the most common ailment treated by physiotherapists and chiropractors.

What is Low Back Pain? Low back pain can be isolated to the lower portion of the back, but can also radiate to the posterior buttock and thigh. Pain and numbness that radiates down the posterior leg to calf or foot is called sciatica. It is caused by impingement of the large sciatic nerve which runs from the buttock to the toes. The cause of low back pain can be diverse as there are many structures that can be injured. A complete and thorough assessment of your movement patterns, strength and abilities must be completed to determine which structure is at fault. Common injuries include disc herniation with or without nerve impingement, facet joint (small joints between vertebrae) sprains, postural syndrome (pain caused by poor posture) and muscle strains. At times, pain from the organs of the abdomen or pelvic regions can radiate to the low back. Your health professional can help to determine if the pain is visceral (from the abdominal organs).

While X-rays and MRIs have often been prescribed for low back pain, recent studies demonstrate that there is limited information that can be gained from these investigations and they are often not necessary. The exception to this rule is if there are prolonged neurological signs. It is critical to note that in a major 2014 review by Brinjikji et al that there are signs of degeneration (wear and tear) in a very high percentage of healthy people with no problem at all. Rarely there can be serious complications from nerve damage associated with low back pain. If you have numbness or weakness in both legs or in the saddle region, or if you lose control of your bowel or bladder, you should seek medical attention urgently.

How can Low Back Pain be Avoided?

Two main aspects that can be changed to avoid low back pain is posture and lifting technique. Good posture involves a slight S curve to your spine with your ears, shoulders and hips being almost in a straight line. People with desk jobs should make sure that their computer is fitted well with an appropriate chair. For lifting, bend your knees and pull the object as close as possible to the body. This allows your powerful leg muscles to do most of the work.



As for maintenance exercise, keeping your core strong is essential. This can be done in a variety of ways included specific strength training exercises, yoga, or Pilates. Many local programs and gyms will offer

classes targeted to keeping core strong. Sit ups or crunches will not do it. Take the time to ask your therapist or strength and conditioning expert on what would be good for you.

What can be done? Although pain killers such as Non-Steroidal Anti-Inflammatories (NSAIDs) can be useful for the initial symptoms, they should not be offered alone. Hot or cold compresses or electrical modalities (TENS - sometimes used by therapists) can also be used for short term relief. Treatments such as exercise, education and mobilization or manipulations can often quicken healing and reduce symptoms significantly. Often a physician may offer a short course of medication to be coupled with physiotherapy, chiropractic, or registered massage therapy.

The precise treatment will depend on the assessment of the structures damaged. Because it is so common, many people will give advice on what helped when they had a similar pain. It is critical to remember that the exercises that helped one person, may in fact be harmful to another. Bed rest is also not recommended. Except for the extremely rare case, research demonstrates that bed rest will prolong symptoms. Most therapist will recommend relative rest, meaning some time in a restful position of ease, interspersed with stretching, low grade strengthening and walking.

At Physio Sport Med we have the physician and therapist expertise to provide a solid assessment and treatment plan to address your Low Back Pain injury.