

## **Back Pain Part 1**

By Dr. Donald Hudson

This article is the first in a series about back pain.

Do you know the causes of back pain? Back pain is a major medical problem because it affects nearly all humans some time during their life. The basic structure of our back makes it unstable and subject to injury unless the supporting ligaments and muscles are kept healthy and strong. Your backbone, or vertebral column, is actually a stack of more than 30 small bones called vertebra. Together they create a bony canal that surrounds & protects your spinal cord. Small nerves enter and exit the spinal cord through spaces in your vertebra.

These vertebra are held together by muscles, ligaments and tendons. Between the vertebra are intervertebral discs and these act as “shock absorbers” and prevent the vertebra from hitting one another when you walk, run or jump. They also allow you to twist, bend, flex and extend without injuring the vertebra or nerves.

Your lower back, which carries most of your weight, is the site of most back pain. Injury to the low back frequently causes referred pain to other areas of the spine. Low back pain can have many causes, but some of the most common reasons are strains, sprains and spasms. This is followed closely by osteoarthritis, herniated discs, osteoporosis and fibromyalgia.

Low back pain usually responds to conservative treatment. We define conservative treatment as alternating use of ice & heat, Alive or Motrin, a brief period of rest (1-3 days) followed by a progressive return to full activity. If you have repeated injuries, they can lead to a chronic condition. This may be seen as popping of the joints or tendons, re-occurring aches and pains, and restricted motion. These may last for a short time, or they may never go away completely. The people who are active, maintain near ideal body weight, keep their muscles in good tone, eat appropriate foods, drink adequate amounts of water and pay close attention to good body mechanics as it relates to their daily lives, have many less injuries, and less daily pains.

Back pain can be a simple problem, or it can represent serious or more uncommon causes. If you have pains that are getting worse in spite of conservative treatment and/or that seem to last more than 2-6 weeks, these need to be further evaluated by your medical practitioner.

Additional causes of back pains include the following:

- Osteoarthritis - a degenerative joint condition that causes slow deterioration of your cartilage.
- Herniated discs - usually occur because of normal wear and tear or an exceptional strain which causes the disc to rupture.
- Osteoporosis - results from decreased calcium in your bones which usually occurs because of ageing and may be a normal process.
- Fibromyalgia - a very complex problem; it is a chronic problem and has the issues of fatigue and wide spread pain in your muscles, ligaments and tendons.

In rare cases, back pain may indicate a much more serious problem such as cancer, kidney disease, and diabetes, problems with a major blood vessel, or an infection. With all of the above-listed types of problems, you need to see your practitioner to help define the cause of the pain. Once the cause is identified then appropriate treatment can be started.

Exercise, weight control and a proper diet all play a major role in being healthy and being as pain free as possible.

Any questions or concerns can be addressed to the practitioners in the clinic.