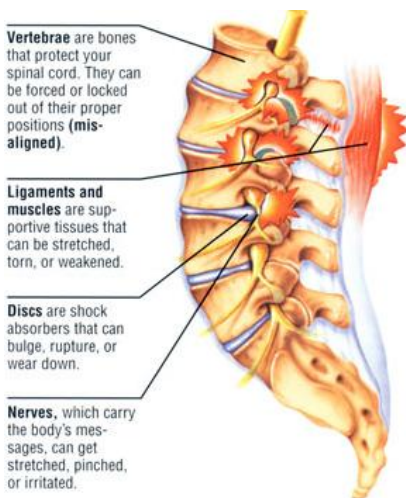




# Back & Neck Disorders



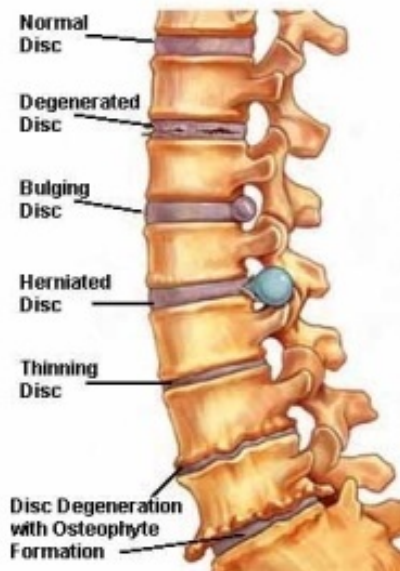
Injuries in this region can be classified into 3 major categories: mechanical pain, disc disorder and spinal stenosis. Each disorder has a pattern of presentation and has been proven to respond well to physical therapy and exercises. Early intervention is key to successful treatment.



**Mechanical Pain:** Also known as a joint that has gone “out,” facet joint dysfunction, and sprain/strain.

This term is often used to describe pain that is caused by vertebrae (bones in the spine) not moving properly. An individual can experience too little movement at a vertebrae (hypomobility) or excess movement at a vertebrae (hypermobility). Both of these mechanical problems respond excellently to manual therapy and modalities offered by Physical Therapy. It is imperative the correct diagnosis be made in order for the treatment to be effective. Hypomobile segments required manual therapy techniques to restore movement and appropriate muscle/ligament function, while hypermobile vertebrae require a customized core strengthening program to stop excess movement from occurring. This excess movement can lead to advanced wear and tear on the spine and can become a chronic condition of “instability” if not addressed. Frequently patients present with both hypo and hyper mobile vertebrae and thus require a thorough assessment with a customized treatment plan.

**Examples of Disc Problems**



**Disc Disorders:** Also known as a bulging disc, slipped disc, pinched nerve, sciatica and degenerative disc disease.

The discs in your spine are fluid filled sacs that cushion the vertebrae in the spine. They consist of a tough, yet flexible outer shell that protects the soft, jelly-like centre.

A bulging disc is when the disc literally bulges outside its usual parameters. This is a common disorder seen through the aging process and starts to appear between the ages of 35-45. As we age, the spine compresses, which can then push the disc material flat and outward. If the disc bulge comes into contact with the nerve in the region, there will be pain. Because each nerve travels a specific path through the body, pain associated with disc bulges can travel a distance along the nerve. For example: a disc bulge in the neck can lead to pain radiating down the arm all the way to the fingers, and a disc bulge in the back can lead to pain radiating down the leg all the way to the toes. Sometimes disc disorders cause more pain in the extremity than they do at the neck or back.

An injury or trauma is not required to onset a disc disorder. These can be a result of wear and tear. If an injury is present, it is usually from a bend and twist mechanism. Disc pain is often made worse with sitting and bending and is often moderate to severe in nature affecting many different activities of daily living such as dressing, driving a car, lifting and carrying.

Treatment for disc disorders focuses on trying to decompress the region involved through spinal decompression or traction. The goal of treatment is to take pressure off the nerve. In some cases medication is required to treat the nerve pain (neuropathic pain). There is also a need to treat local surrounding structures that may have dysfunction including muscle spasm, tight muscle and ligaments, stiff joints and swelling. A core strengthening program must be initiated in an attempt to stop the condition from worsening.

**Stenosis:** Also known as osteoarthritis or advanced degenerative disc disease.

Spinal stenosis is a narrowing of the spaces within your spine which can put pressure on the nerves that travel through the spine.

As mentioned above, pressure on nerves can lead to travelling pain along the nerve pathway.

Stenosis is more common in people over 65 years old and often present with pain that is worsened with walking or standing activities. With stenosis, the vertebrae often have bony changes associated with arthritis, including bone spurs or osteophytes.

Treatment for stenosis is very similar to disc treatment, however due to the advanced degenerative changes to the spine, may also require further medical intervention such as medications, injections and in some cases surgery.

