

SPINAL ARTHRITIS:

A CHIROPRACTIC PERSPECTIVE

BY WAYNE FUSCO, D.C.

Arthritis is one of the most common chronic ailments affecting seniors, and various forms of the disease affect over 40 million Americans. One in five adults in the United States report having arthritis, and over 50% of adults over 75 have been diagnosed with the disease. As a chiropractic physician, I specialize in the treatment of a specific form of arthritis in the spine, called spinal degeneration. This newsletter seeks to explain what causes spinal degeneration and why chiropractic care is the most effective treatment option for the disorder.

Overview

Spinal degeneration is one of the most common causes of back and neck pain in those over 50 years old. It is characterized by progressively worsening pain (which can be worse with weather changes), and stiffness (which is usually worse in the morning). To understand what causes spinal degeneration, a brief anatomy review is necessary.

Our spines have 24 bones called vertebrae. The vertebrae are separated by cushions called intervertebral discs. These discs, which are composed of an outer fibrous layer and an inner fluid-like layer, act as shock absorbers and decrease the compressive load of the spine. They allow for movement and are the major weight-bearing joints of the back. The hallmark finding of spinal degeneration is the deterioration, or narrowing of these spinal discs.

For several years scientists considered spinal degeneration to be an inevitable aspect of aging. Considered “normal”, the standard of care was to provide medication to alleviate symptoms. We now

know that spinal degeneration is not normal, but rather is the direct result of untreated spinal injuries which create decreased spinal motion and structural instability.

Mechanical Cause of Spinal Degeneration

The inner portion of the adult disc receives no direct blood supply after age 30, and must therefore rely on diffusion of nutrients from the surrounding area. This occurs through a process called imbibition, whereby nutrients are “pumped” into the disc by movement of the joint. The key to this process is joint movement. The more movement of a spinal joint, the more nutrients delivered to the disc. Any injury to the spine can alter or decrease joint motion, which will directly reduce nutrient delivery to the disc, thereby accelerating the degenerative process.

Structural Cause of Spinal Degeneration

A Spinal injury can also result in altered structural integrity or stability in one or more vertebrae. The medical term for this is a subluxation. A subluxation is best described as when one bone of the spine twists or shifts from its normal position. It is a common injury which can occur suddenly (as with a sports injury, fall or automobile accident), or gradually over time (typically with postural problems associated with daily repetitive tasks at home or work).

When a spinal bone shifts from its normal position (subluxates), it causes abnormal, unbalanced pressure on the disc below it. Left untreated, this creates instability and causes the disc to wear down faster than normal over time. This instability creates bone spurs called osteophytes to

form, which are another characteristic finding of spinal degeneration.

Chiropractic Treatment of Degeneration

The purpose of chiropractic treatment is to restore the structural integrity and normal biomechanics of the spine. By performing spinal manipulations, a chiropractor attempts to a) increase the motion in the spinal joint, and b) re-align structural subluxations. The result of such treatment is increased joint motion and improved structural stability.

Chiropractic treatment is effective for degeneration in two ways. First, normalizing joint motion results in increased diffusion of nutrients to the disc. Second, improving structural stability reduces the abnormal, unbalanced compressive load on the disc.

By addressing the underlying causes of spinal degeneration, chiropractic treatment goes beyond symptom relief and attempts to prevent the future progression of the disorder. Combined with specific strengthening exercises and ergonomic training, chiropractic care offers the most comprehensive treatment strategy for spinal degeneration.

Conclusion

With the population aged 65 and older expected to double between 2011 and 2030, it is imperative that we address the problem of spinal degeneration. It is a progressive disorder due to an unresolved injury which takes years to develop. It is not normal and can often be prevented. Ask your chiropractor if you have spinal injuries which may lead to arthritis, so that you can stop the problem before it starts.