

## Osteoarthritis

Osteoarthritis (OA) is the most common joint disorder caused primarily by biomechanical changes due to aging and wear and tear on a joint. In the event of trauma, infection or congenital joint disorders, osteoarthritis is diagnosed as a secondary condition, or derived from, the prior mentioned disorders. The most commonly joints affected are the shoulders, hips, knees, hands and spine. It is also known as degenerative joint disease and degenerative arthritis.

Typically those who suffer from this condition experience very similar symptoms. These symptoms include but are not limited to:

- Pain and stiffness in the joints
- A rubbing, grating, or crackling sound when you move the joint.
- "Morning stiffness", referring to the pain and stiffness you may feel when you first wake up in the morning that is normally improved throughout the day.
- Noticeable changes in joints related to weather

More often than not, I have found that there is a misconception about what OA actually is and whether chiropractic care is a viable option for those who have it. For the purpose of this article, I will focus on osteoarthritis of the spine and how chiropractic therapy can be a beneficial treatment option to those who have OA.

Osteoarthritis of the spine, simply put, is an increase in bony growth around joints and spinal vertebrae due to mechanical instability. This type of arthritis can start as early as the early 20's with noticeable changes in the structure of the spine shown on x-ray. In primary OA, these changes are typically due to biomechanical joint dysfunction that can be the result of participation in high contact sports (i.e. football) fractures or injuries to the joint (i.e. car accidents, falls) physically demanding occupations (i.e. mechanics, military), obesity and aging. Although changes can be determined in the 20's and 30's, most people don't show signs and symptoms until after their 40's and has a greater prevalence in occurring in post-menopausal women.

Arthritis of the spine usually happens in two different regions: the neck and the low back/pelvis. Regardless of the region on the body that arthritis is present, the same physiology occurs. What happens is that the cartilage that lines joints in the spine called facet joints, start to breakdown due to mechanical stress which then cause the facet joint itself to move improperly. This is highly important because once these joints start moving improperly (faulty movement) they become inflamed and cause pain. In severe cases, the cartilage can be completely worn away from the joint exposing bare bone. Inflammation sets in around the joint which cause irritation to the nearby nerves (i.e. nerve pain, tingling and numbness, burning) and create tight and tender muscles. This can cause extreme discomfort because the joint, which under normal circumstances moves freely, now has limited range of motion and is bathed in inflammation. The body will attempt to stabilize the inflamed facet joint by

creating bone spurs (aka osteophytes) on the facet joint itself as well as the vertebrae it is attached to. Normally, bone spurs and osteophyte formation themselves do not cause additional pain unless they become very large and are formed in the regions where nerves are housed. This is commonly referenced as a “pinched nerve” due to osteophyte formation. Additionally, this narrowed space can cause an overcrowding effect of structures contained within the spinal and foraminal canal (spinal stenosis) that will also cause nerve pain, inflammation and a reduction in circulation to surrounding areas.

Your provider can discern whether or not you have osteoarthritis of the spine through a thorough history and examination. An x-ray will be taken to confirm the diagnosis, which regions are involved and the extent of degeneration. In severe cases when there is a loss in sensation and significant muscle weakness that is getting worse, an MRI evaluation may be more appropriate. OA of the spine is conventionally treated with pain relievers like acetaminophen or NSAIDS and sometime nerve blocks until the point of pain becomes intolerable and surgical intervention is warranted.

Current research highly supports conservative treatment options offered by a chiropractor who also uses therapeutic modalities in conjunction with spinal manipulation in treating individuals with this condition. The spinal adjustment is performed using an instrument and is awarded with delivering the safest most effective results to individuals with osteoarthritis. The spinal adjustment greatly reduces local inflammation, improves pain and stiffness while simultaneously increasing range of motion to the arthritic joint and surrounding structures. Your chiropractor will help customize an at home treatment to give you ultimate control of the progress you make. Research also advises that along with chiropractic care, staying active and exercising helps to maintain joint movement and promotes long-lasting results obtained from the above mentioned treatment. Although these treatments cannot make the arthritis go away, they do often delay surgery and improve quality of life tremendously. Under normal circumstances, it usually takes 6-8 weeks of care to improve the flexibility of the joints involved.

If you believe you have this condition or are more interested in exploring different management options, contact your healthcare provider for more information. Remember, the key to a successful outcome in managing arthritis is to get a proper diagnosis so that proactive treatment may begin.

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