



What Other Diagnostic Services May Be Needed?

Your doctor may order one or more special tests to help confirm your diagnosis, rule out other problems and pinpoint the source of your spine pain.

- **X-rays** show the general condition of your vertebrae (bones) and are very helpful in determining the cause of pain. Although x-rays cannot reveal a ruptured disc, they may reveal a narrowed disc space which can be an indication of trouble in that area of the spine.
- **MRIs** (Magnetic Resonance Imaging) and CTs (Computerized Tomography) produce detailed computer images of soft tissues and bones. MRIs are especially beneficial for the study of soft tissue abnormalities such as disc degeneration, protrusion or rupture. CT scans give a cross-section view of the spine and can show a bulging or ruptured disc.
- **EMGs** (Electromyography) measure the electrical activity of your muscles' contractions. They detect nerve or muscle irritation and damage.
- **Bone scans** can reveal abnormal bone activity.

Why Are Injections Used?

Injections play an important therapeutic and diagnostic role in treating osteoarthritis of the spine. Cortisone compounds control pain and reduce inflammation so that normal activities can be resumed and physical therapy can be started. Specific injections also help locate the exact region that may be causing the primary problem. Often, there are numerous painful areas of the back and neck, and most are secondary to the primary irritated area of the spine. Only by identifying and treating the primary problem may the secondary painful areas be relieved. At that point, a specific program is developed to treat the problem.

What Can Physical Therapy Do?

Poor posture and improper body mechanics (the way you move your body) often lead to painful episodes of arthritis. A balanced program of physical therapy and exercises can help strengthen and stretch the muscles that support your back.

Contributing to the Community's Health

Frequently people inquire as to how they may make a contribution to the community's health. We encourage you to consider Glendale Adventist Medical Center's Healthcare Foundation whenever you or your family desire to make a difference in the health of our community. For more information, please call (818) 409-8055.

Physician Referral (818)409-8100

Understanding Arthritis of the Spine

at Glendale Adventist
Medical Center



There are a number of options for treating arthritis of the spine, each with their advantages and disadvantages.

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What Is Osteoarthritis?

Osteoarthritis, also called degenerative arthritis, is the most common form of arthritis. It is the result of "wear and tear" and affects the spine in much the same way it affects other joints in the body.

What Causes It?

In the earliest stages, osteoarthritis occurs when the discs that separate the vertebrae in your back and neck begin to dry out. Normally, the discs act as shock absorbers, cushioning the stresses on the vertebrae. Once the discs dry out, they can no longer absorb shock, and the surrounding cartilage and ligaments begin to deteriorate. As the arthritis advances, other portions of the spine are affected, especially the small spinal joints called facets. Arthritis also narrows the discs and causes irritating spurs on the vertebrae. If not treated, arthritis can lead to a stiff and painful back or neck.

What Are the Symptoms?

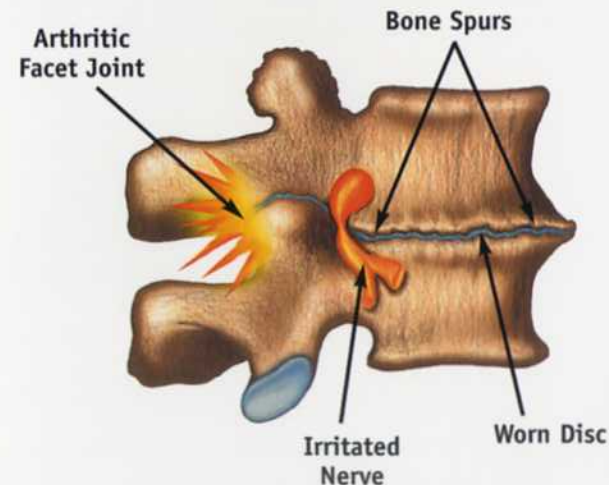
The primary symptom is a gradual onset of pain in the back or neck. The pain is the result of irritated nerve endings in the damaged areas. Frequently, stiffness occurs and certain positions increase the pain. The muscles overlying the arthritic areas often become tight and painful, further complicating the problem. As the arthritis progresses, sensitive spinal nerves become "pinched" by arthritic bone spurs, or become irritated by inflammation. Pain felt in the legs, coming from an irritated spinal nerve is called sciatica.

First Line of Defense

Oral non-steroidal anti-inflammatory medications are the first line of treatment for minor arthritis. These include Tylenol, aspirin or their derivatives including Motrin, Celebrex and Vioxx. These medications must be taken under the supervision of a physician. The primary side effect to watch for is stomach upset and irritation. They can also cause liver and kidney problems, requiring frequent blood tests. The physician may also add muscle relaxants or low dose pain relievers.

What Can a Back Specialist Do for Me?

It is always important to treat the underlying problem. Although arthritis can involve the entire spine, the specific area causing the pain must be treated. To pinpoint the cause of pain, the doctor may use x-rays and a comprehensive physical examination. If a pinched nerve or



After years of giving good service, the vertebrae wear down and discs begin to flatten. Arthritis spurs form, irritating the nerve root and causing pain. This is a common cause of sciatica.

Anatomy of the Spine

Spinal Canal

Vertebra – the spine is made up of 24 vertebrae

Disc

Facet Joint

spinal stenosis (narrowing of the spinal canal as a result of arthritis) is suspected, special scans such as CT or MRI are useful to see the internal structure of the spine. EMG (Electromyogram) and nerve conduction studies will check the function of your spinal nerves. Several treatments are available, depending on which areas are contributing to your pain.

Anti-inflammatory medicines, facet injections, nerve root injections (blocks), or an Epidural Steroid Injection (ESI) can ease pain and inflammation. Once the pain cycle is controlled, a physical therapy program may be helpful in preventing recurrent episodes.

How Are Injections Done

A cortisone-like drug is placed into the affected area or facet joint. These cortisone compounds are potent anti-inflammatory agents that deliver medication directly to the area of inflammation. A local anesthetic is used to numb the area and there is relatively little discomfort. An injection is done by your doctor in about the same time it takes for a routine office visit. After an injection, people may return to their usual activities shortly.