

Synovial Cyst of the Spine:

Summary

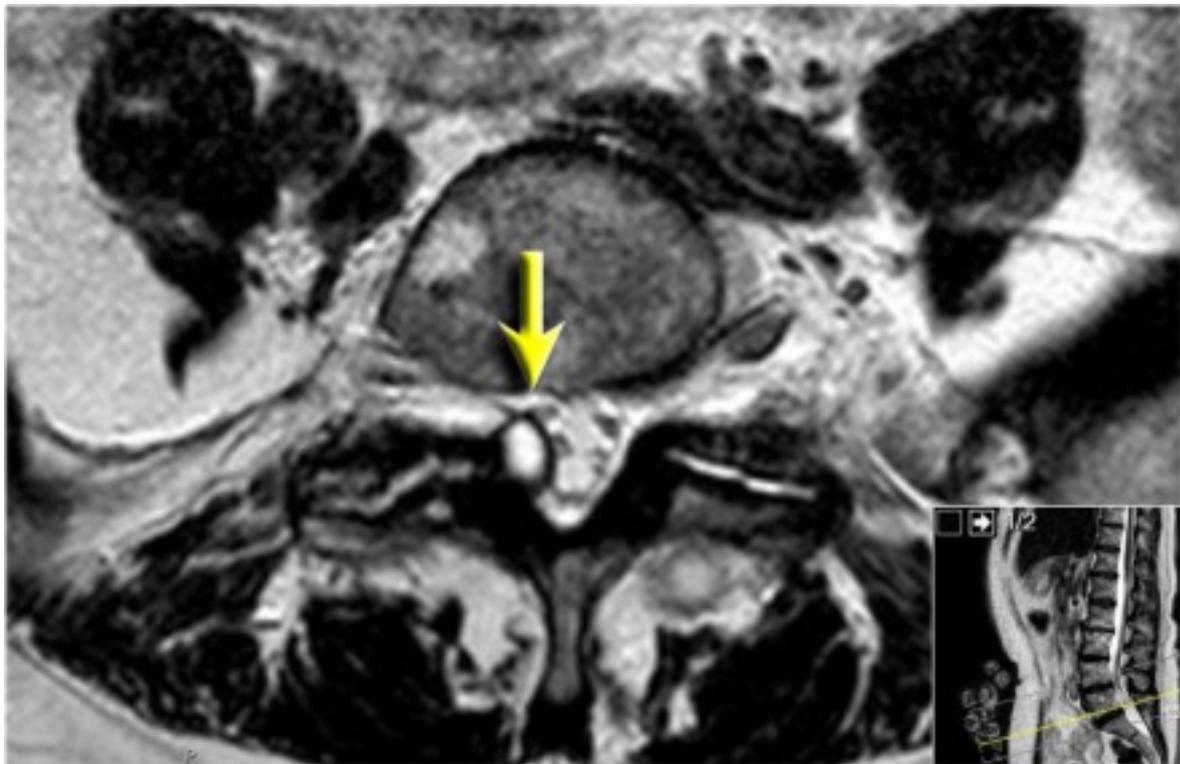
Synovial = having to do with a type of joint that is lubricated by synovial fluid

Cyst = an abnormal, fluid-filled sac

Synovial cysts are abnormal fluid-filled sacs in joints in the spine. These cysts are benign, which means they are not cancerous.

Synovial cysts typically develop as a result of degenerative changes that occur with aging. They can be found throughout the spine, but are most common in the lumbar region (low back).

The spine has many joints. Synovial cysts develop in the facet (fess-ET) joints of the spine. These are the joints between the bony projections at the back of the vertebrae.



Synovial Cyst of the Spine:

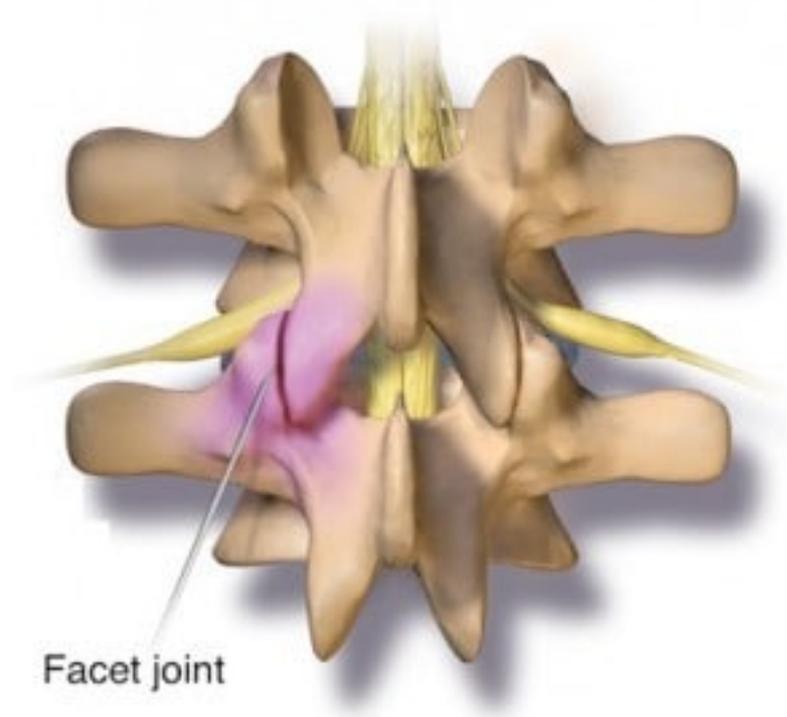


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Symptoms

Symptoms depend on the size and location of the cyst.

Some patients may not experience any symptoms. However, some patients will experience back and leg pain that is better when sitting and worse when standing and walking. This is because in a fully upright posture, the spinal canal naturally narrows, placing additional pressure on the spinal cord and nerve roots. The spinal canal naturally expands a bit when in a seated or flexed forward posture often relieving the excess pressure from [spinal stenosis](#).

If the synovial cysts are large enough, they may cause [spinal stenosis](#), or narrowing of the spinal canal. In spinal stenosis, the spinal canal becomes too narrow to allow the spinal cord and surrounding spinal nerves to move freely. As a result, patients may experience numbness, tingling or weakness in one or both legs.

If the spinal nerves are pinched in the lumbar (lower) spine, patients may experience pain, cramping, numbness, weakness or heaviness in both legs that is often worse while standing and walking. This is referred to as [neurogenic claudication](#).

Furthermore, synovial cysts may also cause [sciatica](#)—leg pain in one or both legs that typically radiates down the back of the leg and to the foot.

Synovial Cyst of the Spine:

Rarely, synovial cysts can cause [cauda equina syndrome](#). This is a condition in which the *cauda equina*—the sac of nerves and nerve roots at the base of the spinal cord— is compressed.

Causes and Risk Factors

Synovial cysts are most often caused by age-related degeneration. They are most common in patients older than 65 years.

Synovial fluid, contained in a membrane called the synovial sac, lubricates the facet joints and helps them move smoothly. In response to degeneration, the body may produce more synovial fluid in an attempt to keep the joints moving smoothly. It is thought that synovial cysts form when this extra fluid builds up inside one section of the synovial sac.

Systemic diseases that affect the joints, like rheumatoid arthritis, can also be associated with synovial cysts.

Tests and Diagnosis

- X-ray (also known as plain films) –test that uses invisible electromagnetic energy beams (X-rays) to produce images of bones. Soft tissue structures such as the spinal cord, spinal nerves, the disc and ligaments are usually not seen on X-rays, nor on most tumors, vascular malformations, or cysts. X-rays provide an overall assessment of the bone anatomy as well as the curvature and alignment of the vertebral column. Spinal dislocation or slippage (also known as spondylolisthesis), [kyphosis](#), [scoliosis](#), as well as local and overall spine balance can be assessed with X-rays. Specific bony abnormalities such as bone spurs, disc space narrowing, vertebral body fracture, collapse or erosion can also be identified on plain film X-rays. Dynamic, or flexion/extension X-rays (X-rays that show the spine in motion) may be obtained to see if there is any abnormal or excessive movement or instability in the spine at the affected levels.
- Magnetic resonance (MR) imaging – a diagnostic procedure that uses a combination of large magnets, radiofrequencies, and a computer to produce detailed images of soft tissues and bones.
- Computed tomography (CT) scan – a diagnostic imaging procedure that uses a computer and X-rays to produce images of bones and soft tissues.

Treatments

The goal of surgical treatment is to remove the cyst and decompress (provide more room for) the spinal cord and nerve roots. This surgery is similar to a [microdiscectomy](#).