



TREATMENT

What Is a Spine Surgeon?

Many demands are placed on your spine. The parts of the spine – including the vertebrae, intervertebral disks, and facet joints – work together to allow you to stand and move; hold up your head, shoulders, and upper body; and give you flexibility to bend and twist. The spine also protects your spinal cord.



"Spinal stability is the ability of the spine under physiologic loads to limit patterns of displacement so that the spinal cord and nerve roots are not damaged or irritated and, in addition to prevent incapacitating deformity or pain due to structural changes."

- White and Panjabi

If something damages the spine, such as an injury or degeneration (wear and tear), it can affect the spine's ability to function properly and cause symptoms that affect your quality of life. When this happens, you may need to see a spine surgeon.

Spine surgeons are orthopedic surgeons or neurosurgeons who dedicate a substantial portion of their practice to the treatment of spinal disorders. They typically diagnose and treat a variety of conditions related to the spine, including back pain, neck pain, leg or arm pain and tingling, scoliosis, fractures of the spine, spinal tumors, and spinal infections.

What special training do spine surgeons receive?

Spine surgery is a dedicated subspecialty for orthopaedic surgeons and neurosurgeons. This means that to become a spine surgeon, a person must:

- Complete at least 1 full year of specialized training in spine surgery after their initial 5- to 7-year residency.
- Dedicate a large portion of their practice to conditions of the spine (often, at least 70%).
- Receive certification in surgery of the spine through their appropriate medical board. In the case of
 orthopaedic surgeons, the American Board of Orthopaedic Surgery (ABOS) certifies spine surgeons. In
 the case of neurosurgeons, the American Association of Neurological Surgeons (AANS) certifies spine
 surgeons.

What do spine surgeons do?

Spine surgery is the field of medicine that deals with problems of the neck (cervical spine) and back (thoracic and lumbar spine). Spine surgeons:

- · Offer both surgical and nonsurgical treatments
- Are specially trained to operate when necessary
- · Often, are also experts in diagnosing and caring for conditions of the spinal cord and nerves
- May treat only children (pediatric spine surgeons), only adults, or both

Common conditions that may be treated by spine surgeons include, but are not:

- Degenerative disk disease of the neck and back
- Fractures of the spine
- Herniated disks
- Infections of the spine
- Tumors of the spine

Spine surgeons who also treat spinal cord and nerve-related issues address issues like:

- Cervical spondylotic myelopathy
- Cervical radiculopathy
- Lumbar radiculopathy
- · Spinal cord tumors
- Thoracic myelopathy

Spine surgeons who specialize in the treatment of children may also treat spine conditions that are commonly diagnosed in infancy, childhood, or adolescence, such as:

- Isthmic spondylolisthesis
- Kyphosis (roundback)

- Pars fractures or defects
- Scoliosis
- Spondylolysis and spondylolisthesis

Spine surgeons treat both surgical and nonsurgical conditions. They typically divide their time between:

- The operating room, performing procedures to address conditions that require surgery
- The office/clinic, performing examinations to diagnose problems, treating non-operative conditions, preparing patients for surgery, and seeing patients for follow-up after surgery

Spine surgeons in academic medical centers also train medical students, residents, and fellows. They may also participate in research projects, write manuscripts, and teach at conferences.

Why visit a spine surgeon?

If you have pain in your back or neck, or pain radiating (traveling out) to your arm or leg, you may want to consult a spine surgeon. Because many spine surgeons devote most of their time to examining, treating, and studying the spine, they are experts in spine care. This specialized expertise can help ensure an accurate diagnosis and appropriate treatment.

It is important to know that seeing a spine surgeon does not mean you will end up having surgery. Some conditions do require an operation (doctors call these "surgical conditions") But for many issues, the first line of treatment is often nonsurgical: therapy, pain medications, and/or injections. Surgery may then be recommended if these conservative treatments do not improve symptoms and/or function.

Does it matter whether I see an orthopaedic spine surgeon or a neurospine surgeon?

Both orthopedic surgeons and neurosurgeons who have completed specialized training for spinal surgery can treat patients with spinal disorders and are capable of performing spine surgery when necessary.

What to expect at your visit with a spine surgeon

Depending on your condition, most spine surgery visits will include the following:

- The surgeon will ask questions to get a history of your condition so they can better understand your symptoms.
- This will typically be followed by a physical exam with a focus on the area of your spine that is troubling you.
- The surgeon may obtain X-rays at the time of your visit to look at the bones in your spine.

• If further information is needed to make a diagnosis or plan treatment, the surgeon may order <u>nerve</u> <u>studies</u>, <u>computed tomography (CT) scans</u>, <u>magnetic resonance imaging (MRI) scans</u>, ultrasounds, or other diagnostic tests.

Spine surgeons often recommend trying nonsurgical treatment options first, including:

- Back/neck directed therapy. This combination of physical and occupational therapy is designed to restore movement and reduce or eliminate pain.
- **Injections**. <u>Spinal injections</u> are typically performed by physical medicine and rehabilitation (PM&R) doctors, also known as physiatrists, in a procedure suite.
- **Medication**. Some conditions might respond to prescription or over-the-counter medications, such as non-steroidal anti-inflammatory drugs (NSAIDs).

For patients with surgical conditions or conditions that do not improve after nonsurgical treatment, surgery may be recommended. Depending on the condition, surgery may be urgent (e.g., fractures or infections) or elective (e.g., scoliosis, degenerative disk disease, herniated disk), which will affect the timing of surgery.

Looking for a spine surgeon in your area? <u>Find an FAAOS spine surgeon</u> (surgeons who are members of the Academy of Orthopaedic Surgeons).

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