

Spinal Disorders and Injuries

An overview

By Maria Oldham

The Spine's Function

An extension of the central nervous system (CNS), the spinal cord is a vital part of the human body and its workings, transmitting messages between the brain and the body. It is protected by the bony vertebral column as it runs down through the cervical, thoracic, and lumbar regions of the spine. The vertebral column itself extends further into fused vertebrae (bones) in the sacrum (pelvis) and coccyx (tailbone).

Along with the peripheral nervous system (PNS), made up of nerves branching off from the spinal cord, the CNS controls three main things: motor functions, which are voluntary muscle movements; sensory functions, which monitor touch, pain, temperature and pressure; and autonomic functions, which regulate urination, digestion, body temperature, heart rate, and blood pressure. Essentially, it controls our body's processes, so any injury or damage to the spine can potentially affect the entire body.

Injuries vs. Disorders

While both spinal injuries and disorders can have some of the same effects on the vertebral column and spinal cord, they differ in their origin. A spinal injury is caused by some sort of trauma to the spine. A spinal disorder may be the result of constant stress on the spine, infection, tumors, congenital conditions, aging bones, or repetitive or high impact trauma or injuries.

Both injuries and disorders can cause a number of health issues, including nerve pain, degeneration, paralysis, and loss of brain or body functions.



Did you know?

The vertebral column (in a typical adult) contains 33 vertebrae:

- 7 in the cervical region
- 12 in the thoracic region
- 5 in the lumbar region
- 5 fused vertebrae comprising the sacrum
- 4 fused vertebrae comprising the coccyx (tailbone)

Source: American Association of Neurological Surgeons

Healthy Habits

While spinal cord injuries and disorders often cannot be prevented, there are steps you can take to help keep your spine as healthy and safe as possible.

- **Drive safely** to avoid accidents.
- **Wear proper sports gear** to help prevent injuries.
- **Maintain a healthy weight** to keep unnecessary pressure off the spine.
- **Exercise regularly** to keep muscles and joints in good shape.
- **Practice good posture** to keep the body aligned.
- **Stretch every day** to keep the spine flexible.
- **Lift heavy objects** with your legs, not your back.
- **Avoid sleeping on your back** to keep as much as 50 lbs. of pressure off your spine.
- **Eat lean proteins, vegetables, and fruits** to help build strong core muscles.

If you are experiencing back or neck pain, it's important to see a doctor and find out if your symptoms could be the result of a spinal disorder or injury. Here are some questions to ask your physician:

- Are there any exercises I can do to alleviate the pain?
- Could my work environment be affecting my back health?
- What might worsen my back pain?
- Could these symptoms be a sign of something more serious?
- Is medication necessary?
- What kind of tests, if any, will I need to undergo?

Finding a Spine Specialist



Q *My back and/or neck have been hurting. I spoke with my primary care physician who said I need to be evaluated by a spine surgeon. I know there are different types of doctors, but what do I need to look for in finding a spine specialist?*



DR. JAMES OSBORN



DR. GARRICK CASON

A There are many factors to consider when looking for a spine specialist or any orthopedic specialist and it is a good idea to ask questions. How long have you been practicing? Are you fellowship trained in the field you are practicing? Are you board eligible or certified? At which hospital/hospitals do you perform your procedures? What are the risks associated with the procedure you are recommending?

By asking questions, you will be in a better position to find a physician that works with the specific condition that you may be currently suffering from and a hospital that is best equipped to treat your condition.

You will find that there are general orthopedic physicians and then those with additional training who specialize in specific areas such as foot/ankle, knee, hand/wrist, total joint and neck/spine. We recommend looking for a physician who is board certified or board eligible and one who has had fellowship training in the specialty you are seeking. Don't assume all physicians have specialty training.

At SkyRidge Medical Center, we have the region's only ACGME fellowship trained spine surgeons. The Accreditation Council for Graduate Medical Education (ACGME) is additional criteria that the fellowship program has to adhere to in order to be credentialed.

You will also want to identify which facilities your physician has privileges. It is good to review the facility and ensure it is covered within your insurance plan and has positive outcomes. Be sure to ask questions specific to your procedure such as infection and re-admission rates for your surgeon and the hospital.

When asking how long a physician has been in practice, you are looking to find a physician who has experience or if just starting out, is in an established practice with experience.

While the web is a great resource to find out about your condition as well learn about the physicians and facilities; one note to remember is that it is always better to ask directly. Websites and Internet information may not be current or accurate.

The surgeons at Cleveland Spine Specialists offer advanced treatment for neck and spine issues. Their approach to care is patient centered and personalized. They focus on the least invasive treatments recommendable; utilizing conservative options before considering surgical procedures. For more information on services at **SkyRidge Medical Center** or **Cleveland Spine Specialists**, visit our website at www.SkyRidgeMedicalCenter.net.



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Drs. Osborn and Cason are members of the medical staff at SkyRidge Medical Center.