

# Don't let back pain slow you down

Live a pain-free life

**BEST  
HOSPITALS**

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**NATIONAL**  
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# Spine Center

## at Wake Forest Baptist Health

Wake Forest Baptist has a long and well-established program for diagnosing and treating back and neck pain problems.

Surgery is only one of many options. Our experts provide extensive physical and occupational therapies, a functional spine restoration program, and a pain control program.

Our team includes specialists from Anesthesiology, Neurosurgery, Orthopaedic Surgery, Pain Management, and Physical Medicine & Rehabilitation.



### Back pain relief experts in North Carolina

Our team of neurosurgeons, orthopaedic surgeons, physiatrists (physical medicine and rehabilitation specialists) and primary spine providers are trained and experienced in all aspects of spinal care. They offer patients of all ages a wide range of nonsurgical and surgical treatment options, including:

- ▶ Physical therapy
- ▶ Spine surgery
- ▶ Ultrasound and fluoroscope-guided injections
- ▶ Other injections

### What are common causes of back pain?

Back pain is a condition that can occur easily. Common causes include:

- ▶ Being overweight
- ▶ Diseases such as osteoporosis, arthritis, scoliosis or spine disorders
- ▶ Heavy lifting
- ▶ Inactive, sedentary lifestyle
- ▶ Older age
- ▶ Poor posture and body mechanics
- ▶ Smoking
- ▶ Sports-related injury
- ▶ Stress
- ▶ Trauma

### What are some common conditions treated at Wake Forest Baptist?

The symptoms of back pain and neck pain vary depending on the source. The following conditions are some of the most common back problems:

- ▶ **Back strain** – The pain can be caused by strained muscles or ligaments of the spine. The pain can also be caused by a degenerative disease of the joints between the bones of the spine. (There may be other causes, too.)
- ▶ **Herniated disk** – Caused when a disk bulges out from its proper place as the shock absorber between the vertebrae or bones of the spine. A herniated or ruptured disk may press on nearby nerves, causing severe pain.
- ▶ **Radiculopathy** – Problems with nerve roots that radiate to other parts of the body. Symptoms include weakness, pain, numbness or tingling. Some people have a combination of these symptoms.
- ▶ **Sciatica** – Pain that travels into the buttocks, the back of the thigh and sometimes further down into the lower leg and foot. The nerve root of the sciatic nerve usually is irritated, often by degenerative disease or compression of a disk.
- ▶ **Scoliosis/spinal deformity** – Scoliosis is a curvature of the spine often found in childhood. Depending on the severity, scoliosis can be treated without surgery. Once a curvature is detected, it should be closely monitored by a spine specialist to track any progression of the condition.
- ▶ **Spinal stenosis** – Caused when the spinal canal has narrowed, typically in the lower back or neck. Pressure on the back nerves causes pain, numbness and weakness in the legs. The pain is worse when walking.

## How can you treat my back pain?

Some back pain may be relieved by changing a few simple things like:

- ▶ Wearing orthotic shoes
- ▶ Switching to a special chair to help relieve back pain
- ▶ Doing stretches or other exercises at home

Other therapies may include:

- ▶ Physical therapy or manipulation therapy
- ▶ McKenzie therapy
- ▶ Structured spine therapy
- ▶ Interventional diagnostic techniques (discography)

If your back does not respond to physical therapy, we can use other treatments to relieve your pain:

- ▶ Steroid injections
- ▶ Sacroiliac joint injections
- ▶ Selective nerve blocks and other treatments

## What if I need surgery? What are my options?

If you do not respond to any of the therapies noted above, your doctor may evaluate you for back surgery. Surgical and minimally invasive procedures offered include:

- ▶ **Discectomy** – Procedure that removes all or part of the cushion (disk) that helps protect your spinal column. Your doctor may recommend this surgery if you have a herniated disk and other noninvasive treatments have not helped. If you have leg pain or numbness, severe muscle weakness in your lower legs or if the pain spreads from your buttocks to legs, you may need surgery.
- ▶ **Foraminotomy** – Surgery that widens the opening in your back where nerve roots leave your spinal canal, which will relieve pressure on the nerve root. This spine surgery may be necessary if your symptoms include pain in your thighs, lower back, calf, shoulder, arms or hands, or if you experience any numbness or tingling.
- ▶ **Laminectomy** – Operation that removes bone spurs or enlarged bone growths that have formed on your spine over a long period of time. If you have pain or numbness in one or both legs, weakness or heaviness in your buttocks or legs, or your symptoms are interfering with your daily life, you may need this surgery.
- ▶ **Robotic spine surgery** – This state-of-the-art technology uses the Renaissance® Guidance system to increase surgical accuracy, lower complication rates, reduce pain and enable faster recovery. Conditions commonly treated are: scoliosis, degenerative disc disease, herniated disc, kyphosis and spondylolisthesis.

- ▶ **Scoliosis surgery** – Procedure that repairs the abnormal and sometimes painful curving of the spine (scoliosis) by straightening the spine and aligning the shoulders and hips.
- ▶ **Spine fracture surgery** – Operation that repairs broken bones (vertebrae) in your spine. These fractures may be caused by osteoporosis, trauma to the back or neck, or a tumor that has either started in or spread to your spine. Surgery may be required if the pain is severe or disabling, has lasted for more than two months and has not become better with other treatments.
- ▶ **Spinal fusion** – Surgery that joins together two bones (vertebrae) in your spine because the vertebrae may have moved out of alignment. If you have a herniated disk or an injury that resulted in a spine fracture, your surgeon may think that spine fusion will ensure a better chance that your fracture won't be reinjured.
- ▶ **Spine tumor, general treatment** – A spine tumor is a growth of cells (mass) surrounding the spinal cord. Some spine tumors are malignant (cancerous) but others are not. Removing the tumor can relieve pressure on the spinal cord. It is important to start treatment as soon as the tumor is discovered. When radiation treatments or chemotherapy have not been as effective as hoped, your doctor may suggest removing the tumor through spine surgery.
- ▶ **Spine tumor, radiofrequency ablation** – A minimally invasive procedure to treat pain caused by metastatic, malignant spine tumors. The OsteoCool™ RF Ablation System is a same-day procedure performed while you are under conscious sedation. Your surgeon will position a probe within the tumor, and then radiofrequency energy heats and kills the surrounding tissue. This creates immediate pain relief. (During this setting, your surgeon may also perform vertebral augmentation to help stabilize fractured vertebrae and reduce pain.)
- ▶ **Vascular malformation repair or removal** – A spine vascular malformation is an abnormal connection between veins and arteries in your spine, creating a lesion. Each lesion is unique, so a treatment plan is tailored to each patient.



Dr. Charles Branch performs robotic spine surgery.

## Meet our Spine Center team



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