Orthopaedic Associates of Central Texas (OACT) has board certified physicians and orthopaedic surgeons to treat spine disorders. We offer both general and specialized spine care, starting with a complete evaluation and treatment options to include non-surgical approaches, advanced surgical options, and rehabilitation. Our physicians and surgeons have advanced training in caring for the spine (neck to lower back) and use the latest advancements in technology to diagnosis, and perform the correct treatment plan to maximize your recovery.

The Spine:

Your spine is the wondrous bony framework that helps keep you upright—the literal backbone of your body. Your organs, muscles, and other bones depend on it for foundation, stability, flexibility of movement, and balance. Think of all the activities that depend on your spine: walking, running, bending forward and backward, dancing, riding, sitting, turning, rotating. It’s your body’s workhorse.

Injury, Trauma, or Aging to the Spine:
Sometimes trauma (from a sport injury, fall, or car accident, for example) weakens the ligaments, discs, muscles and structures of the spine or disrupts their normal function. Sometimes the spine can weaken just from the normal wear and tear of aging. Whatever the cause, pain and dysfunction in the spine can cause symptoms in the spine itself or in the extremities.

Spinal dysfunctions can cause stiffness, numbness, swelling, tenderness, and discomfort for entire portions of the body and slowly restricting your movements. Even the simplest daily activities can become painful—slowly diminishing your mobility and, ultimately, your quality of life.

**Non-Surgical Treatments:**

- Physical Therapy
- Occupational Therapy
- Epidural steroid injections
- Various local, trigger point, and joint injections

**Surgical Procedures:**

- Minimally invasive spine surgery (discectomy, decompression, fusion)
- Kyphoplasty and vertebroplasty for compression fractures
- Cervical (neck), thoracic, and lumbar (lower back) decompression:
  - Discectomy, corpectomy, laminectomy
- Cervical, thoracic, and lumbar fusions with modern instrumentation.
- Anterior (front) and posterior (back) spine operations

**Minimally invasive procedures:**

Many Williamson County, Round Rock and Central Texas residents have experienced the benefits of minimally invasive spine surgery. Many common open procedures used to stabilize fractures, thereby reducing pain and correcting the deformities when possible can be performed with minimally invasive procedures. Since the spinal procedures are less invasive, they have been shown to improve mobility and enable patients to return to everyday activities such as walking, bending, and lifting with significantly less pain.
that they had prior to the procedure. Patients also report improved mental health, vitality, social function, and emotional well-being.

**Anterior Cervical Decompression and Fusion**

*Treatment:* For disc herniation in the neck, spinal cord compression, radiculopathy or myelopathy. A common cause of spinal cord dysfunction is the degenerative change in the cervical spine that, in advanced stages, can cause compression of the spinal cord. Symptoms often develop almost unobserved and are characterized by neck stiffness, arm pain, numbness in the hands, and weakness of the hands and legs. Pressure is relieved form the spinal cord and nerves in the neck, and the spine is reconstructed by the fusion with instrumentations.

**Anterior Lumbar Interbody Fusion**

*Treatment:* For back pain from disc degeneration pinched nerves, sciatica, stenosis. The disc is removed from the front of the spine to decompress nerve roots or to remove a painful disc. The spine is reconstructed with synthetic cage placed in the disc space and packed with a collagen sponge containing bone morphogenic protein (BMP). This promotes a spine fusion without the need to use bone graft. Screws and rods can be used in the back to strengthen the entire construct while the bone heals.

**Cervical Laminoplasty**

*Treatment:* For Spinal cord compression and myelopathy Spinal Cord compression can cause significant neurological problems such as difficulty using the hands and walking. Cervical laminoplasty relieves spinal cord compression by expanding the spinal canal. The bones forming the “roof” over the spinal cord in the back of the neck are called “lamina”. These are cut and repositioned rather than removing them completely and a fusion is not usually needed. The spinal cord is relieved of pressure resulting in neurological improvement.

**Kyphoplasty and Vertebroplasty**
**Treatment:** For compression fractures due to osteoporosis, cancer, or kyphosis. If left untreated, one fracture can lead to subsequent fractures; often resulting in a condition called kyphosis, and can cause persistent back pain and disability. Kyphosis presses the chest and abdominal cavity, leading to many potential health consequences. With balloon Kyphoplasty, two small incisions are made on either side of the spine. A small surgical balloon is guided through the cannula into the vertebra. Using intraoperative x-ray, the fracture is indirectly re-expanded and stabilized with bone cement (similar to that used for hip and knee replacement). After surgery the pain from the fracture is reduced and a brace is not usually needed.

**Minimally Invasive Lumbar Discectomy and Decompression**

**Treatment:** For disc herniations in the back, sciatica, radiculopathy, spinal stenosis. A herniated disc or spinal stenosis can cause severe leg pain by pinching a nerve. This procedure uses a small incision, about an inch long, through which a surgical tube is inserted. The disc herniation is removed through the small tube, thereby relieving the pinched nerve. Patients can go home the same day and usually experience significant pain relief immediately following surgery.

**Surgery Determination**

To determine whether you need surgery, consult the physicians at Orthopaedic Associates of Central Texas. A doctor or PA who specializes in your problem will evaluate your medical history, take X-rays, and assess your range of movement and level of back or neck pain. If, together, you decide that surgery is required, the aim of the procedure will be to correct the deteriorating condition, help you regain movement, and eliminate the pain you have been experiencing.

If you do opt to have the surgery, it would help for you to do some homework ahead of time. Practice using a walker (you’ll use one temporarily after surgery) and become familiar with the specific exercises you will need.
to do after surgery. After surgery, some movement may be initially limited, but this will improve over time.

Learn about using a safe walking pattern and equip your home with self-help devices such as a raised toilet seat, a bath bench, and reaching tools. Your activity will be restricted at first. Observe these restrictions to give your back or neck proper time to heal.

A personal exercise program designed by one of our staff physical therapists will help to restore muscle balance and allow you to walk more comfortably. Continuing exercises at home and at our outpatient physical therapy facility for several months following surgery will help you regain strength and independence. An active lifestyle which includes water exercises, walking, and biking is essential in keeping you healthy and flexible. Gauge your daily activities with your surgery in mind. Avoid strenuous movements such as twisting, jumping, and running.

After surgery, the back or neck pain you had will be gone, but you may have some discomfort when you stretch, and you may experience some pain at the site of the surgery. This will decrease and disappear over time.

FAQ About Spine Surgery

Q) Once I decide to have the surgery, how soon can it actually take place?

A) Allow at least two-three weeks to prepare for the surgery. You may need additional examinations and testing, especially if you opt to donate your blood for the surgery. However, in cases of trauma or specific circumstances where there is a fast progression of symptoms, your surgery can happen faster.

Q) What are the materials used in my spinal surgery made of?
A) All materials used in spinal surgeries are made of a material that should not conflict with your current tissues or be rejected by your body, such as titanium or metal alloys.

Q) How painful is spinal surgery?

A) As with all forms of surgery, spinal surgery is painful, but the pain is manageable. For the first one to two days after surgery, pain is very well controlled with a PCA (patient controlled anesthesia). After that, oral medications, such as Percocet or Vicodin, are usually adequate. Sometimes patients require further (but less frequent) pain medication once they leave the hospital.

Q) What are the possible complications?

A) Although chronic illnesses increase the risk for any surgical patient, spinal surgery has a very low rate of complications. On a national average, fewer than 3-4 percent of patients experience joint infection or other major difficulties. Complications within our practice have been even lower. Infections are the most common complication and these can be prevented with pre-operative and post-operative antibiotics and gentle exercises that begin soon after surgery.

Q) Is bleeding around the incision after surgery normal?

A) It is not unusual to have some mild bleeding that soaks through the dressing but this should have stopped before you are released from the hospital. Should this happen and you are at home, you should reinforce the dressing with more sterile gauze. However, if bleeding persists, contact the office.

Q) What if I can't go home immediately after surgery?

A) Unfortunately, many patients don’t have a healthy spouse or close family member at home to help them during the initial days and weeks after surgery. For those unable to depend on family or close friends, staying in a skilled nursing facility at the hospital for one to three weeks is occasionally
an alternative. Home Health care is also available for patients who are home bound and have a skilled need for therapy and/or nursing.

Q) Are there important tips for post-surgery?

A) It’s critically important to avoid situations in which you could fall or injure your back. You may need some assistance for a few weeks, especially while you are regaining your balance, strength, and flexibility. Do not sit in low seats or chairs, squat to pick objects off the floor, cross your legs, or drive until your physical therapist indicates you may begin to do so.

Q) When can I return to regular exercise?

A) Most patients who undergo spinal surgery are ready to return to exercise and light activities, such as golf, within three to four months after surgery. Follow the instructions from your physical therapist regarding regular, light exercise.

Q) How long will the effects of my spinal surgery last?

A) Disc replacement parts generally last for the life of the patient.

Expectation for Spine Surgery (Before and After Surgery)

Pre-operative: It will take approximately 45 to 60 minutes to get signatures for surgical consents and to review the instructions regarding your surgery. Be sure to bring a list of current medications, including the drug name, dosage, and the days and times you typically take them.

Pre-admission Appointment: Prior to this appointment—which takes place at the hospital—you should have had your pre-operative tests performed by your family doctor. This appointment will take approximately one to two hours for lab tests, including blood work, EKG, and chest X-ray. If you have a heart or lung condition, or if you are an insulin-dependent diabetic, you must see your family doctor prior to surgery and get medical clearance.
Before you leave, you will also meet with someone from the anesthesia department.

**Before Surgery**

**Admission:** You will be admitted to the hospital the morning of your surgery.

**Medications:** Stop anti-inflammatory medications and/or aspirin; if you take anticoagulants such as Coumadin, aspirin or Lovenox, your surgeon will tell you how long you should cease taking them prior to surgery.

**Food and drink:** Do not eat or drink anything for eight hours prior to surgery, except for prescribed medications. On the day of surgery, if you do have a prescribed medication to take, swallow it with a small sip of water.

**Length of Surgery:** The length of surgery varies with the procedure; it may take **as little as two hours but four to six hours is not unusual**, followed by another one to two hours in the recovery room.

**After Surgery**

**Length of Hospitalization:** Average stay can range **from one to five days**; this varies greatly on the type and extent of each procedure and patient. Please consult your Orthopaedic Associates of Central Texas surgeon to get the most accurate estimation.

**Anesthesia:** Patients undergo general anesthesia.

**Blood Transfusions:** If you choose to do so, you can donate one to two units of your own blood to be used after surgery if necessary. This will be arranged for you pre-operatively in coordination with your family doctor.

**Physical Therapy:** It is critical after spinal surgery to get the patient mobile as soon as possible. **Usually by the end of the day you have your surgery, a physical therapist will help you move from your bed to a chair.** By the end of the first post-op day, you will stand upright and walk a short distance. After you go home from the hospital, you will need physical
therapy from three to six times a week for three to six weeks. **Before surgery, please consult with our staff to arrange outpatient physical therapy with Orthopaedic Associates of Central Texas.**

**IMPORTANT:** Prior to surgery, VERIFY INSURANCE BENEFITS FOR YOUR CONTINUOUS PASSIVE MOTION (CPM) AND PHYSICAL THERAPY. THESE ITEMS ARE NOT ALWAYS COVERED BY ALL COMPANIES. IT IS VERY IMPORTANT THAT YOU CONFIRM THE NUMBER OF PHYSICAL THERAPY VISITS APPROVED BY YOUR INSURANCE COMPANY FOLLOWING SURGERY. INFORM YOUR PHYSICAL THERAPY PROVIDER ABOUT WHAT HAS BEEN APPROVED BEFORE YOU BEGIN THERAPY.

**Using a Walker:** Initially you may walk with a walker, which will be provided while you are in the hospital. As you progress, your physical therapist may switch you to crutches or a cane.

**Wound Care:** The surgical dressing is usually removed after two or three days. You may keep the incision open to air as long as there is no bleeding or drainage. Prior to suture removal, we recommend keeping the incision dry. We will remove any sutures that may have been placed in the office approximately two weeks after your surgery.

**Pain management:** For the first one to two days after surgery, pain is very well controlled with a PCA (patient controlled anesthesia). It is important to maintain a schedule for the pain medications provided and prescribed. It is best to address the pain before it intensifies. Pain is manageable with medications and will lessen as your surgery heals. Pain medicine can cause itching, nausea, and/or constipation. These are all common side-effects of narcotic-based medications and do not necessarily indicate a drug allergy.

**Driving:** Most patients are able to safely drive a car **approximately two to six weeks after surgery** for very short distances only. We recommend that patients do not drive cars with a manual transmission while they are healing because of the sudden and jerky movements that can accompany shifting gears and using the clutch. You should consult your physician prior to increase driving or other activity.
**Home Care:** You may need help with normal daily activities for three to five days following discharge from the hospital. We recommend that you have someone stay with you after you leave the hospital for at least a week (and longer if possible). If this is not possible, please let the nurse know you will need assistance after surgery.

**Things to Report:** Call the office at (512) 244-0766 if you develop any of the following:

- Redness around the incision
- Drainage or bleeding from the incision
- Fever over 101 degrees
- Increased swelling
- Severe pain that is unrelieved by post-op medication
- Severe weakness in bowel or bladder
- Severe unexplained weakness
- Persistent headaches or lightheadedness

**Return to Work:** Following spinal surgery, you will be able to return to sedentary work **eight to twelve weeks after surgery.** We recommend restricting certain work activities:

- No heavy lifting
- Limited bending, stooping, and squatting
- Follow Physicians orders

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**The Spine Center**

The Spine Center at Round Rock Orthopaedics & Rehab is a team of expert medical professionals (physicians, office staff, operating staff, and medical assistants) and facilities (Round Rock Orthopaedic & Rehab offices and Round Rock Hospital) focused on the same goals; improving the spinal care of patients in Williamson County, Central Texas, and the Great Austin Area. The Spine Center was created in 2004 with a team approach for spinal care, and specializes in: disc herniations, nerve and spinal cord compression, spinal stenosis, sciatica, radiculopathy and myelopathy, vertebral compression fractures, sports related neck and back injuries, spondylolisthesis,
spondylolisthesis, degenerative conditions of all areas of spine, tumors and spinal fractures.

The team of medical providers and facilities:

- Dr. Mustasim Rumi is the Medical Director for The Spine Program at St. David’s Round Rock Medical Center and is in private medical practice at Round Rock Orthopaedics & Rehab, where he is one of the key physicians at The Spine Center. Dr. Rumi is an orthopaedic surgeon with advanced fellowship training in spine orthopaedic surgery and specializes in care for the entire spine, from neck to lower back disorders.
- Dr. Jeffrey DeLoach is a physician who specializes in physical medicine and rehabilitation. He is fellowship trained in the general non-surgical diagnosis and treatment of a range of orthopaedic conditions, with an emphasis in interventional non-surgical spinal medicine.
- Two (2) additional physicians with training in non-surgical treatment of the spine, with a focus on sport injuries and physical medicine and rehabilitation.
- Six (6) orthopaedic surgeons with training to care for general spine and general orthopaedic trauma.

Facilities used by this team of professionals:

- The medical practice of Round Rock Orthopaedics & Rehab has dedicated staff, rooms, and equipment to diagnosis and treat a wide variety of spine problems.
- Round Rock Medical Center has invested in the equipment and staff to perform many of the most complicated procedures available in Williamson County and Central Texas.