

ALZAHRA HOSPITAL NEUROSURGICAL TREATMENTS FOR BACK AND NECK PAIN.



Back pain and neck pain

Back pain could have one or more of quite a few direct causes. Frequently back pain is caused by a type of comprehensive arthritis identified as spondylosis. Chronic degenerative changes as well as sudden trauma can add stresses on the joints of the neck and back that will cause pain. Certain joint pains in the neck and back often feels stiff and is often worse in the morning and with inactivity. It could possibly improve throughout the day as the joints "stretch". Anti-inflammatory pain medicines and muscle relaxers often help minimize the pain. There is a chance that this type of back pain may not improve with surgery subject to its connection with pain in the legs.

Back pain could also be due to collapse of the intervertebral discs and irregular motion in the spine. An extreme instance would be an acute trauma with a ruptured spine and spinal unsteadiness. Deteriorating changes over time can also lead to irregular motion. This type of back pain is often accompanied with pain in the arms or legs caused by pressure on the nerves, and therefore this type of back pain may benefit from surgery.

The most frequent causes of back pain are due to overwrought muscles and do not require any surgery. It usually heals over time

with much needed rest. There is a time when physical therapy is needed which is on a less frequent basis. Depending on your current symptoms, physical examination results and scan reports, you may or may not require surgery to heal quickly. Conventional management must be improved, then based on healing process if there is no improvement, surgery could be considered.

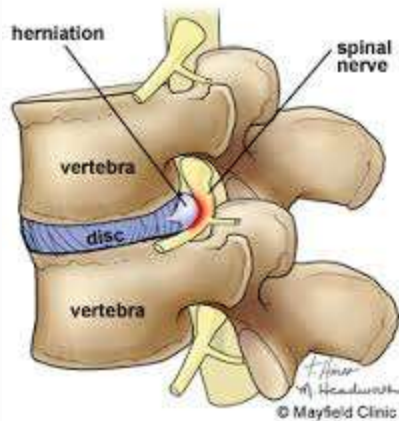


How do you treat ruptured or herniated discs?

Our surgeons operate to remove the disc fragments to leave more space for the spinal cord or nerves. The next step is to take out all the soft disc material that is pinching the nerve root or spinal cord. If you have an injured cervical disc, our surgeons evaluate the need for discectomy or replacement. As we offer both treatments, we can assist you to choose the most appropriate treatment option based on your individual circumstance.

are lower back (lumbar) fusions necessary?

Lumbar spinal fusion is surgery to join two or more vertebrae in the low back. Spinal fusion usually lasts several hours and is categorized as a major surgery. It is usually identified If there is too much motion at a lumbar spinal level, every time the patient



Moves, the nerve tissue can be briefly compressed resulting in severe pain and brief or permanent neurological injury. When the pressure is taken off, spinal fusion may be required.

Which type of surgery has a greater success rate?

At present research related to the long-term results of minimally invasive spinal surgery are limited. These assessments are currently ongoing. However, the short term success of minimally invasive spine surgery has been well established. It has come to light that minimally invasive surgery allows a faster recovery and return to daily events and exercise/sporting activities. There is less post-operative discomfort and shorter hospital stay following surgery. At alzahra hospital, we guarantee our patient's safety as we provide the best service, caring for success in treatments provided.

How long will I be in the hospital and how long is recovery time?

The length of the surgery and recovery time depends on the type of procedure you undergo. Our surgeons will provide you with the information prior to surgery. The length of surgery will depend on what type of procedure you have as well as your condition before surgery. Our surgeons will review your treatment and recovery plan with you.

Recovery time depends on the kind of procedure and condition, the patient's age, and health status before the surgery. You may feel some soreness around the area of the incision post-surgery. You will not be able to perform heavy lifting, exercise or activities for a few weeks.

What are the risks associated with brain or spine surgery?

Every surgery is associated with risks. However, in the hands of our well-trained, dedicated and certified neurosurgeon, these risks are quite small. The risks include weakness, numbness, bleeding, paralysis, spinal fluid leakage, difficulties in wound healing, incision infections, and complications due to other existing ailments such as: diabetes, hypertension, persistent pain, and failure to fuse. Before any surgery, it is always important to discuss any risk specific to your condition with your surgeon.

Minimal Invasive Surgery

We always offer the minimal and most effective non-invasive surgical methods; handling our patients in what we feel would most help them. Invasive surgical therapy is offered individually according to the patient's needs and as a final resort. Minimally invasive procedures for treating back pain, neck pain and disc prolapse problems have undergone great recent development globally and are done under local anesthesia to solve most of back and neck complaints. New technology allows the use of these techniques:

- Transforaminal epidural block
- Facet joint and sacroiliac joint block
- Radio frequency neurotomy

These procedures are minimally invasive and are done under local anesthesia with no hospital stay.

About microscopically Minimally Invasive Back Surgery

Advanced technology now enables surgeons to perform surgical techniques, which formerly required long incisions, with minimally invasive techniques where the incisions are very small. This sophisticated

technology is continually being refined but is already available for several back/spine problems that cause chronic pain or disability.

The procedures used in minimally invasive back surgery have improved and expanded over the years to cover a wide variety of back problems. Although not every back problem can be treated this way, many can, and others are being added as the technology and surgical training evolves. Among the conditions that can currently be treated are back pain, neck pain, sciatica, herniated discs, spinal stenosis, deformities such as scoliosis, spondylolisthesis, degenerative disc disease, spine fractures, spinal fusion, infection and tumors.

Advantages

- The small incisions used in minimally invasive spine surgery have numerous benefits for the patient, including less pain after the surgery and less trauma to the surrounding muscles, nerves and soft tissue. In traditional surgeries, these often result in the need for the patient to have physical therapy to regain his strength. Less invasive techniques result in less loss of blood and fewer, lighter scars. Recovery from the surgery is dramatically shorter, from the potential year-long recovery from major back surgery to a few months or less, with the patient able to return to work and his normal activities much sooner. In fact, some back procedures can even be performed as outpatient surgery.



Epidural Nerve Block

Epidural nerve blocks are corticosteroid injections, which are used to decrease pain and inflammation caused by a herniated disc, sciatica, or spinal stenosis. Safe and effective, this treatment option may offer you substantial pain relief without surgery. With the help of today's technology,

the pain specialists accurately diagnose, target, and relieve the source of pain, to help you return to an active lifestyle.

What is an epidural nerve block?

An epidural nerve block is the injection of corticosteroid medication into the epidural space of the spinal column. This space is located between the dura (a membrane surrounding the nerve roots) and the interior surface of the spinal canal formed by the vertebrae.

After a local skin anesthetic is applied to numb the injection site, a spinal needle is inserted into the epidural space. To ensure accuracy and safety, our physicians perform the procedure under fluoroscopic (x-ray) guidance, using a contrast agent to confirm needle placement. Local anesthetic and corticosteroid anti-inflammatory medication are delivered into the epidural space to shrink the swelling around nerve roots, relieving pressure and pain.

How long does it take?

Epidural nerve blocks are performed on an outpatient basis. The procedure typically requires 20 to 30 minutes, including preparation time. It is followed by 45 minutes of observed recovery time.

How often should this procedure be done?

Up to three injections may be given within a six-month time frame. Usually, the injections are performed two to three weeks apart. A set of three injections is the norm; however, you may gain considerable relief after the first or second injection. In that instance, further injections may not be necessary.

What are the expected results?

Epidural nerve blocks are very effective in providing pain relief. The benefit of these injections will typically occur two days following the procedure. In conjunction with physical therapy, many individuals enjoy a pain free lifestyle.

Stop pain from interfering with your life. Resolve your symptoms with help from the board-certified pain specialists at Capitol Spine & Pain Centers.

Diagnostic and Micro-Therapeutic procedure for Disc Herniation

To assure optimal treatment results, diagnostic workup, indication for treatment and actual therapy are carried out in an interdisciplinary fashion by a team of Radiologist, neurosurgeon Surgeons, Neurologists and Anaesthetists.

- Medical history-taking and re-view of medical records from other institutions (patients should bring all already existing medical records with them)
- Special MRI-diagnostics, in necessary under axial load
- Neurological diagnostic work-up, if necessary

Facet Block or Selective Nerve Root Block

What is a Facet Block (Injection)?

The facet joints are paired joints on the side of the midline at each level of the spine. A facet block is a procedure in which a needle is placed into the facet joint under imaging guidance for the nerve root block injection of a local anesthetic and/or steroid. A facet joint injection may be performed at one or multiple levels and on one or both sides (right/left) of the spine. Chief of Neuroradiology, heads our team of imaging physicians, nurses and technologists who specialize in this procedure.

Why Has My Doctor Ordered a Facet Block?

The facet block is a diagnostic test to localize the source of your pain by determining if your pain responds to the injection of medication. Alternatively, this procedure is used to treat symptoms arising from facet joint arthritis.

How is the Facet Block Procedure Performed?

The precise location for the needle placement is determined with imaging guidance. You may experience brief, temporary sensations of pain or an electric shock sensation down the leg. Iodinated contrast is injected to confirm the location of the needle tip.

In more advanced cases, where minimally invasive surgery is not an option, our surgeons perform a vast array of surgical treatments such as

- microdisectomy for low back pain under GA.
- Cervical discectomy with fusion or artificial disc replacement for neck pain and arm pain.
- Spinal instrumentation for fractured spine with plating bone grafting for chronic spinal pain degenerative instability spondylolisthesis and chronic inflammatory spinal diseases.

Disk injections are a wonderful alternative to surgical treatment, for lower back problems after a course of medications and physical therapy is completed, but before surgery is considered. Disk injections can be useful both for providing pain relief and as a diagnostic tool to help identify the source of the patient's back pain.

Disk injections are used in two methods, firstly, as a diagnostic tool to find out the cause of back, leg, neck, or arm pain and the other method being, as a treatment to relieve pain. Disk injections are administered as one part of a more comprehensive treatment program. Long-term treatment plans include an exercise program to improve or maintain spinal mobility and stability.

Disk injections at alzahra hospital are performed by our team of expert Neurosurgeons, and interventional radiologist who make it their priority to give patients the best available treatment in a safe environment so that they lead a comfortable and healthy life.

Disk injections are performed under x-ray guidance, called fluoroscopy, which confirms correct placement of the medication and improves safety. In order to do this, a liquid dye is injected by our experts before the medication. If this liquid dye does not flow in the correct location, the needle is repositioned and additional dye is injected until the correct flow is obtained. The medication is not injected until the correct contrast flow pattern is achieved.

Types of Spinal Injections

Epidural injections

These injections are used to treat a pain that starts in the spine and flows to an arm or leg. Arm or leg pain often occurs when a nerve is inflamed or compressed. These injections involve injecting an anesthetic and an anti-inflammatory

medication, such as a steroid (cortisone), near the affected nerve. This reduces the inflammation and lessens or solves the pain. This type of epidural injection is a therapeutic one. The response to the injection needs to be closely monitored to determine the specific nerve and the primary cause of the pain or if the pain is due to another source.

Facet Joint Injections

Facet joint injections can also be done for diagnostic and therapeutic reasons. These types of injections are often used when the pain is caused by degenerative or arthritic conditions or injury. It treats neck, middle back, or low back pain. For diagnostic purposes, facet joints can be injected in two methods, injecting anesthetic directly into the joint or anesthetizing the nerves carrying the pain signals away from the joint. If the majority of pain is relieved with anesthetic into the joint, then a therapeutic injection is administered.



Microscopically Disk Surgery

Disk surgery is an elective procedure to address an individual's pain or neurological symptoms when all other conservative, non-surgical pain management techniques have failed. Advances in modern medicine and laser technology have made minimally invasive disc surgery a practical alternative as opposed to traditional open back surgery. However, despite the availability of cutting edge treatment, there are some patients who are opting for disk surgery for long lasting pain relief from their disc problems.

A spinal disc is a soft, spongy intervertebral pad that cushions the vertebrae. Along with the facet joints, the discs give a person the flexibility and mobility that they need, while letting the spine handle the stress of supporting the body weight.

However, some discs in the vertebrae deteriorate or is prone to injury. A disc that has become damaged can come into contact with one of the nearby nerve roots or the spinal cord, causing pain and other neurological symptoms. Nerves in the spine are responsible for sending and receiving signals from the body, so when they become irritated, there are many symptoms an individual will experience, such as local pain, travelling pain radiating along the nerve, muscle weakness, numbness and a tingling feeling. In instances, where the symptoms persist despite conservative treatment, surgery will be suggested by our Neurosurgeon to relieve the pain.

Some of the most common types of disc surgery used to decompress nerves and alleviate pain includes,

- Herniated Disc Surgery
- Herniated Cervical Disc Surgery
- Bulging Disc Surgery
- Ruptured Disc Surgery
- Artificial Disc Surgery
- Replacement Disc Surgery

The minimally invasive spine surgery at alzahra hospital state-of-the-art technology to remove the portion of the disc that is causing problems. This procedure offers an incomparable level of precision that allows our experienced surgeons to pinpoint the source of the discomfort, remove it and allow the patient to find relief from pain, faster than before.



DR.ABDULLAH QASSIM

Consultant – Neurosurgeon

FRCS(Neurosurgery).



DR.MOHAMMED RAMZI

FICM.S NEUROSURGERY