# **Back and Neck Pain:**

Frequently Asked Questions



## When is surgery necessary for the back/spine?

While it is true that a number of back conditions resolve on their own, more serious conditions or conditions with unresolved pain can be dealt with by a variety of surgical methods.

Spinal injuries and diseases are among the most complex ailments encountered in a medical practice. Many of our patients suffer from the broad range of disease processes that can affect the spine. These include degenerative conditions (such as lumbar and cervical disc diseases and rheumatoid arthritis), compression syndromes, spinal cord and vertebral tumors, spinal cord malformations, trauma and infections.

At Advanced Neurosurgery Associates (ANA), we first exhaust the most conservative treatments to solve spine problems. However, when surgery is indicated, we employ the latest minimally invasive surgical techniques.

# What is minimally invasive spine surgery (MISS), and when is it indicated?

A minimally invasive procedure can often be performed in a surgical center as a same-day procedure or in an inpatient facility as a 23-hour procedure. It requires a small incision, the use of a microscope and advanced technology.

The advanced technology allows us to utilize this technique in procedures, such as spine fusion. A minimally invasive spine fusion surgery entails two small incisions and can be performed as a posterior lumbar fusion (PLF) or a transforaminal lumbar interbody fusion (TLIF). This surgery achieves similar results to traditional techniques with less pain, less blood loss, less muscle damage and a shorter hospital stay.

#### Conditions and diseases treated by MISS include:

- Degenerative disc disease
- Herniated discs
- Lumbar spinal stenosis
- Spinal infections
- Spinal cysts or nodes
- Vertebral compression fractures

## What are the different procedures for spine and neck pain?

**Microdiscectomy:** A microdiscectomy (and discectomy) refers to the surgical removal of the part of the intervertebral disc that bulges into the spinal canal. Microdiscectomy is performed as a minimally invasive procedure.

**Laminectomy:** Laminectomy, also known as *decompression surgery*, is surgery to remove the lamina, which is a portion of the vertebral bone in the back of the spine that covers the spinal canal. It relieves pressure on the spinal cord or nerves. It also creates a better view of a herniated disc and treats spinal stenosis.

Anterior cervical fusion: An anterior cervical fusion, performed from the lower front of the neck, is done for two reasons: to remove pressure on the nerve roots caused by bone spurs or herniated disc material, and to stop the motion between two cervical vertebrae. The herniated disc is removed and replaced with a "spacer" or synthetic material held in place by screws.

**Posterior cervical fusion:** Posterior cervical fusion, done through the back of the neck, consists of joining together the bones in the back of the cervical spine with plates and screws to treat instability of the spine in this area.

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### Frequently Asked Questions (Cont'd.)

**Spinal (lumbar) fusion:** Lumbar fusion is a surgical procedure performed to permanently join together two or more bony vertebrae of the spine. Fusing bones together can prevent painful motion and provide stability. Discs that are removed or absent are often replaced with a synthetic "spacer" in conjunction with the fusion. Although not as common as lumbar fusion, this procedure can be done in the thoracic area when needed for certain conditions.

**Revision surgery:** A common reason for revision surgery can be a failure to achieve solid fusion (pseudarthrosis) due to poor tissue healing and other patient-related factors. Another reason may be that the condition was not addressed in the original surgery. It could also be due to an improper and/or inadequate postoperative patient rehabilitation. It's important to note that the spine is always changing. Even after successful surgery, it can continue to deteriorate or develop other problems.

**Spinal reconstruction:** Spinal reconstruction involves any or all parts of the spine. It is used to correct significant deformities (scoliosis, spondylolisthesis, kyphosis), disc herniations, traumatic injuries to the spine, degenerative or congenital conditions, and tumor removal.

**Spinal cord stimulation (SCS):** In spinal cord stimulation, soft, thin wires tipped with electrical leads are placed in the back near the spinal column. The wires and a generator deliver an electrical current. That current treats chronic pain with electrical pulses that interfere with the nerve impulses causing pain. The stimulator is given a "trial" period with a less invasive procedure in conjunction with a pain management specialist.

**Pain pumps/intrathecal drug delivery:** A pain pump, technically called *intrathecal drug delivery*, is a surgically implanted device in the lower abdomen that provides a steady stream of medication through a catheter leading directly to the spinal canal. This procedure also has a trial component and is done with pain management input.

**Baclofen pumps for treatment of spasticity:** Baclofen, a medication commonly used to decrease spasticity, works by restoring the normal balance and reducing muscle hyperactivity, allowing for more normal muscle movements. Conditions this device is used to treat are spasticity in cerebral palsy and other movement disorders such as dystonia and for multiple sclerosis. Similar to the pain pump, it is placed after a trial is done. It also provides medication directly to the spinal canal for more effective, targeted treatment.





