

MIS TLIF

Minimally Invasive Transforaminal Lumbar Interbody Fusion

What is MIS TLIF?

First, what is a spinal fusion?

A fusion surgery involves the joining (essentially “welding”) of two vertebrae. This includes removing a damaged or worn out disc and replacing it with a spacer that restores normal disc height. The spacer acts as a placeholder to keep the vertebrae spread apart so there is plenty of room for the nerves. The goal of a fusion is to re-align the spine and fuse the vertebrae into one solid piece of bone to eliminate the abnormal motion causing pain.

How is a minimally invasive lumbar fusion different from a conventional fusion?

Conventional open lumbar fusions are performed through a midline incision that detaches important spine stabilizing muscles from their point of insertion. Minimally invasive lumbar fusions are performed through two 1-inch incisions on either side of the spine by gently separating the muscles surrounding the spine, rather than cutting through them. These small incisions greatly minimize structural damage to bones and muscles such as the multifidus, which is crucial for spine stability. Less structural damage leads to more rapid recovery and return to activities after spinal fusion surgery.



To learn more about lumbar fusion surgery, visit MISCOE.org or [click here](#) for an information packet and [here](#) for examples of actual surgery on our YouTube page.

Normal Discs

Degenerated Discs



Before Surgery

After Surgery



Indications

In general, lumbar fusions are indicated to restore alignment and stabilize the spine while also relieving pressure on nerves. Some common diagnoses requiring a lumbar fusion include spondylolisthesis, degenerative disc disease, and degenerative scoliosis.

How do I know I need a fusion?

Most patients experience back pain radiating down one or both legs with associated numbness, tingling, or weakness. Surgery is indicated when non-operative treatments provide inadequate relief of symptoms and the symptoms significantly limit functioning and overall quality of life.

How does a fusion treat the symptoms?

When a damaged disc is removed and normal disc height is restored with the spacer, pressure is relieved from the nerves. The screws and rods then provide stabilization to prevent painful abnormal motion and stress on the spine.

