
Understanding Minimally Invasive Spine Surgery (MISS)

Minimally invasive spine surgery (MISS) is a type of surgery on the bones of your spine. This type of surgery uses smaller cuts (incisions) than standard surgery. This often causes less harm to nearby muscles and other tissue. It can lead to less pain and faster recovery after surgery. Surgeons can use MISS for some types of spine surgery. These include:

- Lumbar discectomy
- Laminectomy
- Spinal fusion

Why minimally invasive spine surgery is done

Your healthcare provider may advise spine surgery if you have a back problem that hasn't gotten better with other treatment. You may have already tried medicine or physical therapy. If you still have a lot of pain, surgery on your spine might fix the problem. Spine surgery can't fix all types of back problems. Your doctor will only advise spine surgery if you have a problem that surgery may help. This includes conditions such as:

- Herniated disk
- Narrowing of the spinal canal (spinal stenosis)
- Spinal deformity such as scoliosis
- Spinal instability
- Defect in part of a lower vertebrae (spondylolysis)
- Broken vertebra
- Tumor in the spine
- Infection in the spine

MISS uses smaller incisions than standard surgery. This can reduce postsurgical pain and speed up recovery. There may be less cost with MISS as well. Not all types of spine surgery can be done with MISS. And not all hospitals or other surgery places are able to do MISS.

How minimally invasive spine surgery is done

MISS is done by a neurosurgeon or an orthopedic surgeon and a trained medical team. The surgeon will use a type of X-ray to view the surgery. The doctor will make a small incision on your back in the area that needs to be treated. They will put a tool called a tubular retractor into this incision. This will expose the part of the spine to be treated. The surgeon will then pass small tools through this retractor. This includes a tiny camera and a light. Your doctor will then make the needed repairs to the spine.

Risks of minimally invasive spine surgery

Every surgery has risks. The risks of this surgery include:

- Infection
- Excess bleeding
- Pain at the graft site
- Nerve damage
- Blood clots
- Problems from anesthesia
- Leaking of spinal fluid, which may cause headaches or other problems
- Not enough relief of your back pain
- The need for more surgery

Your own risks may vary. They depend on your age, your general health, and the type of surgery you have. Having the surgery at a place that is experienced in this method can help lower your risks. Talk with your doctor about the risks that most apply to you.