Spinal Fusion

Spinal fusion is a type of surgical procedure that is used to help correct any serious spinal problems. The main idea is to fuse all of the painful vertebrae together to make them heal into a solid, single bone.

Spine surgery is often recommended when the doctor is able to identify what the source of pain is, but where other options have failed or where managing the condition is not possible. Imaging tests are often used to help identify where the problem lies. Spinal fusion may be used to treat the following types of conditions:

- Fractures
- Scoliosis
- Slipped disc
- Degenerative disc disease
- Spinal stenosis
- Spondylolisthesis

Spinal fusion used to be commonly performed by surgeons 3-4 decades ago for the common condition of a slipped disc, but its popularity has faded in recent years as a more commonly performed surgical procedure is used: micro-discectomy.

Spinal fusion can be very traumatic to the spine, and consideration for surgery should be taken very carefully. Your surgeon should advise you to exhaust all options, including intensive rehabilitation and therapy, prior to considering spinal fusion.

Spinal Fusion Anatomy

The spine is composed of a number vertebrae, which are all stacked one on top of the other. They are connected by facet joints, and have attachments for muscles and ligaments.

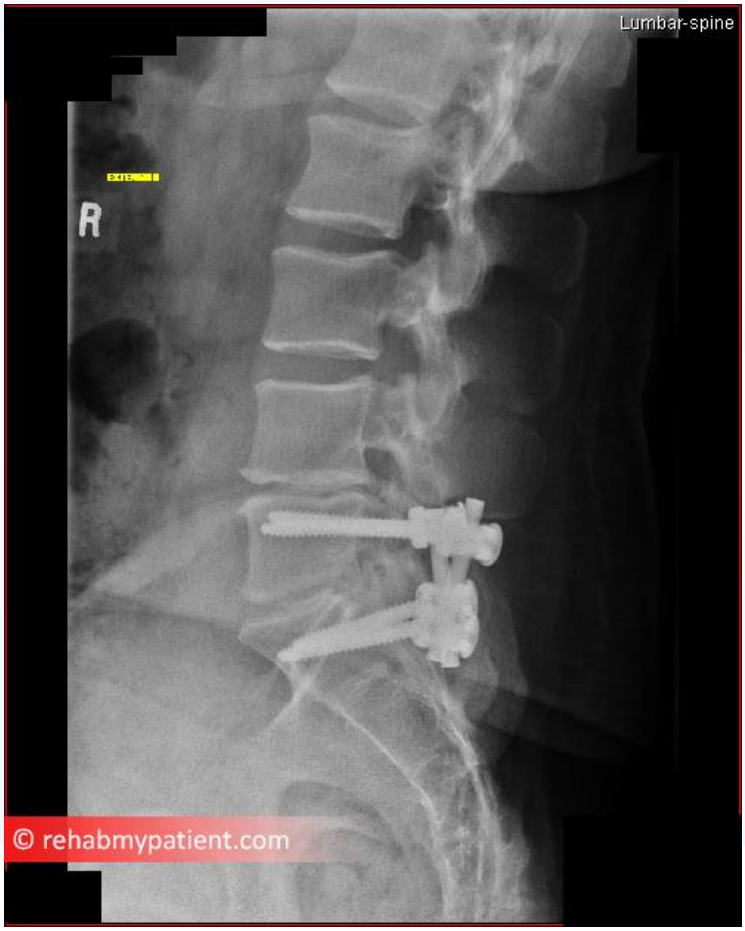
Vertebrae connects to create a canal that shields and protects the spinal cord. It is composed of three distinct sections creating natural curves in your back: chest area (thoracic), curves of the neck area (cervical) and lower back (lumbar). The lower part of the spine is composed of vertebrae fused together. Five lumbar vertebrae join the pelvis and the spine together.

Though a hole in the vertebra the spinal cord runs. This hole or passage is known as the spinal canal and the vertebrae help protect the spinal cord from trauma.

How Spinal Fusion is Performed:

Lumbar fusion has been being performed for a number of decades. Several different techniques can be used to fuse the spine. There are different approaches that the surgeon can undergo for the procedure. The spine might be approached from the front, which is known as an anterior approach. It requires an incision in the lower part of the abdomen.

The posterior approach is done from the back, or a lateral approach allows the spine to be approached from the side. Minimally invasive techniques have also been being worked on, which allows the fusion to be performed without having to use a larger incision. Depending on the location and nature of your disease, the right procedure is going to vary accordingly. Everyone is different, so your specific case will have to be looked at carefully before making a final decision.



X-ray showing spinal fusion of L5/S1

Tips:

- After the surgery, you need to take time returning to your original activities. Recovery initially is 6 weeks, but it will take up to 1 year to get completely back to normal. Begin with light walking. As you get more strength, you can slowly increase your activities.
- Maintaining a healthy lifestyle is important to the healing process, so you want to make sure you are drinking and eating right.
- Adhere to the recovery instructions provided to you to increase your recovery outcome.
- During the healing process, you need to perform rehabilitation exercises and undergo physiotherapy to help recovery.
- Always follow intensive rehabilitation following surgery to strengthen the back, reduce inflammation and muscle spasm, and main mobility to other parts of the spine.