Laminectomy of the Lumbar Spine

Laminectomy is a type of surgery that is performed to remove the lamina, which is the back portion of the vertebra covering your spinal canal. This procedure enlarges the spinal canal to relieve the pressure on the nerves or the spinal cord.

The pressure can be caused from any number of different problems, such as a bony overgrowth within the canal or a herniated disc. It is commonly performed on the lower vertebrae within the neck and the lower part of the back. In the lower back the two most common vertebrae operated on are L4 and L5. It could be that more than one laminectomy is performed depending on the amount of degeneration.

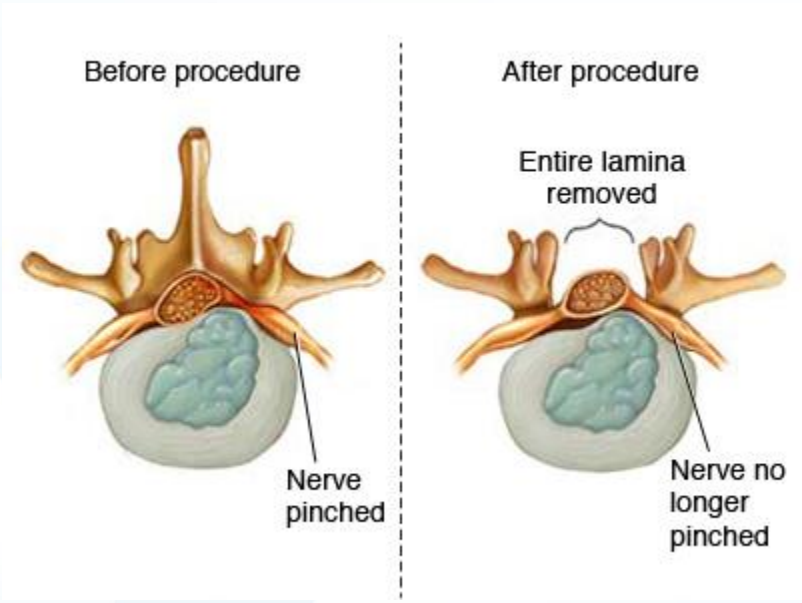
A laminectomy is often used when other conservative treatments have failed to provide you with relief of your symptoms. It might also be recommended if the symptoms are dramatically getting worse or already severe.

Before this level of surgery is performed, the consultant would expect to see that other methods have been tried, such as intensive therapy, epidural injections, or other guided injections. There is an exception and that is if the patient presents with changes in bowels or bladder, or has numbness around the anus, which is potentially a red flag.

Laminectomy of the Lumbar Spine Anatomy

There are 5 vertebrae in the lower back, and 7 in the neck. Each vertebra is made one piece of bone, but different parts of the bone are called different things. For example, the projection at the back of the bone is called the spinous process, and the arch next to it is called the lamina.

When the spinal cord and nerve is pushed by a degenerate disc, the spinal cord has little place to go. The canal (the anatomical tube which the spinal cord runs through) becomes smaller and this is known as spinal stenosis. So by removing the bone at the back there is space for the nerve root and spinal cord to move to. This can relieve pinching of the nerve and reduce nerve pain.



Undergoing a Laminectomy Procedure:

During the laminectomy, you are placed under general anesthesia, so you are out for the procedure. The team will monitor your blood pressure, heart rate and blood oxygen for the duration of the procedure using a blood pressure cuff on your arm and heart-monitor leads that are placed on the chest. After you are unconscious:

- The surgeon will make an incision into your back over the affected vertebrae. It moves the muscles away from the spine as necessary. Using small instruments, the appropriate lamina is removed.
- If the surgery is being performed to treat a herniated disk, the herniated portion of the disk is also removed, as well as any pieces that were broken loose.
- If one of your vertebrae has slipped atop of another one or if your spine is curved, spinal fusion might be needed to stabilize the spine. During spinal fusion, two or more of your vertebrae are permanently connected together with a bone graft, or screws and a metal plate.
- The incision is closed with stitches or staples.

Tips:

- Therapy is a must following surgery, and it will take about 4-6 months depending on the trauma that occurred during surgery.
- Initially it is very likely you will feel worse following surgery, despite the nerve block that is used to cover up the pain. With time, and therapy, symptoms tend to improve.
- A good early indication that surgery has gone well is an improvement or disappearance of pain in the leg resulting from a compressed nerve.
- Laminectomy's are often performed to relieve the pressure the spinal stenosis places on the nerves and spinal cord causing pain, numbness and weakness radiating down the legs and arms.