DEFINITION:

Laminectomy is a surgical procedure performed to treat spinal stenosis. Laminectomy creates space by removing the lamina, the back part of the vertebra that covers the spinal canal. Laminectomy leads to decompression of the spinal canal and creates a larger space for the spinal cord and nerves to travel through. At times, Laminectomy is combined with Discectomy for removal of a portion of the facet to relief Lumbar Radiculopathy or Cervical radiculopathy due to herniated disc.

INDICATIONS:

Spinal decompression is indicated in symptomatic spinal stenosis which does not respond to none operative care or is associated with progressive loss of function (myelopathy, loss of bowel/bladder function, imbalance and falls, progressive weakness, etc.).

DESCRIPTION:

Laminectomy is performed in all segments of the spine. In the cervical spine, laminectomy is performed in conjunction with spinal fusion. Laminoplasty, a standalone decompressive surgery in the cervical spine is a more extensive surgery and is usually reserved for multilevel stenosis and spinal cord compression with myelopathy. A posterior cervical decompression and fusion is more extensive than an anterior procedure (e.g. an ACDF), so the recovery time is longer.

In the lumbar spine when laminectomy is combined with spinal fusion, the recovery is prolonged. The less number of segments requiring decompression, the better the outcome would be. Simple laminectomy takes 2 hours to complete, requires 2 days of hospitalization and 2 months of rehabilitation after discharge from the hospital.

COMPLICATIONS

As with any surgery, laminectomy and laminoplasty carries the potential risk of complications. Complications can be related to anesthesia, surgery or the hardware when fusion in combined with decompression. Laminectomy complications can develop at the time of surgery or in the days, weeks or months following the surgery. List of potential complication include: bleeding, infection, blood clot, injury to blood vessels or nerves or spinal cord, spinal fluid leak, poor wound healing (diabetics), chronic postoperative pain (post laminectomy syndrome) and sexual dysfunction. None-fusion, hardware migration and hardware fracture also may develop soon after surgery in cases that fusion was coupled with decompression.

VIDEO ANIMATION:

Laminectomy
Laminoplasty