# CERVICAL LAMINECTOMY AND FUSION

# INDICATION FOR SURGERY

This surgery is indicated in those patients who have symptoms because of posterior spinal compression in the neck (cervical canal stenosis) as well as real or potential instability.

Compression may be caused by one or a combination of disc protrusion, ligament thickening, growth of bony spurs. Cervical laminectomy removes the bone and ligament that runs along the back of the spine to decompress the nerve roots. In cases where there is the chance of instability, it is necessary to stabilise the cervical spine by adding screws and rods (termed a fusion).

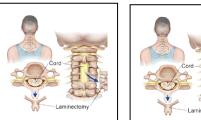


Most patients present with symptoms of spinal cord compression (known as myelopathy) of varying degrees. This may include: clumsy hands, unsteady gait, pins and needles/numbness in arms or legs, bowel or bladder disturbance and arm or leg weakness.

Cervical myelopathy is a progressive although unpredictable condition. The surgery aims to prevent deterioration but cannot be guaranteed to improve symptoms, although this is desirable. Since damage to the spinal cord is irreversible, surgery should be performed before the symptoms become too severe to prevent permanent spinal cord damage. The benefits of the surgery should always outweigh the risks.

## PROCEDURE

The patient is given a general anaesthetic at the start of the procedure to stay asleep. The surgery is performed with microscopic magnification. An incision is made in the centre of the back of the neck and the muscles divided from the bone on both sides. An X-ray is performed to ensure the correct level. The bone along the back of the spinal cord is removed with a high-speed drill. The ligament compressing





the nerve roots is also removed. Screws are inserted into each side at each level and then connected by rods on each side. The final construct position is checked with X-ray.

#### RISKS

Generally, this type of surgery is safe and major complications are uncommon. The chance of a minor complication is around 3 or 4%, and the risk of a major complication is 1 or 2%.

Risks specific to this procedure (but not limited to) include: failure to improve symptoms or to prevent deterioration, fusion failure, worsening of pain/weakness/numbness, infection, blood clot in wound requiring urgent surgery to relieve pressure, spinal fluid (CSF) leak, recurrent nerve compression, nerve damage (weakness, numbness, pain) occurs in less than 1%, quadriplegia (paralysed arms and legs), incontinence (loss of bowel/bladder control), impotence (loss of erections), chronic pain and stroke (loss of movement, speech etc.). or death. (All surgeries carry a risk that can be related to medication, operation or anaesthetic. Risks related to the anaesthetic depend on other medical issues and to the medications used and include heart and lung problems, clots in the lungs or legs etc.)

The results of the surgery may be variable in some people with more extensive disease.

### DISCHARGE AND HOME CARE

Patients can go home after being reviewed by the physiotherapist. The patient should be able to drink, eat and have normal bladder/bowel movement prior to discharge. Most patients go home 5 to 7 days after surgery. It may take a few weeks before feeling normal. Pain can be controlled with tablet pain killers. Any other medications that have been stopped prior to surgery (such as blood thinners) should only be continued after discussion with the surgeon. In some cases, it is necessary to have some rehabilitation before going home. This will be organized during your hospital stay.

Activates such as heavy lifting, bending, twisting of the neck, or moving objects should be avoided. Swimming should be avoided for three weeks after surgery. No heavy lifting for 12 weeks. Patients should continue with exercises prescribed by the physiotherapist. Patients should not drive if they are taking narcotic pills and until they can turn their head adequately to check for blind spots.

Patients may require anywhere between two to six weeks off work (depending on the nature of work).

# WOUND CARE

The wound will be closed with dissolving stitches and reinforced with sticky paper strips. The wound must stay covered for 1 week and the dressing changed each day after showering. After one week, the dressing may be removed and left off. The paper strips will fall off over 1–2 weeks.

The wound should heal within two weeks from your surgery. Patients that have other medical problems such as: diabetes, people who need to take daily steroids for other conditions, and those people whose immune system may be compromised, may need additional time for their wounds to completely heal.

If there is any redness, tenderness, swelling or discharge of the wound, the patient should see their GP immediately.

# FOLLOW UP

Dr. Shanu Gambhir would like to see the patient six weeks after the surgery (with a neck x-ray) for a posoperative review.