CERVICAL LAMINECTOMY AND FUSION

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 in order 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.

REASONS FOR SURGERY

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.

RISKS OF SURGERY

All surgery has some risks and these vary between procedures. The risks with surgery can be related to the anaesthetic, medication or the operation. Risks related to the anaesthetic depend on your other medical issues and to the medications used and include heart and lung problems, clots in the lungs or legs, bleeding and infection. Generally, 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%. Over 90% of patients should come through their surgery without complications. All surgeries carry a small risk of something catastrophic such as death.

The specific risks involved with a cervical laminectomy and posterior fusion include (but are not limited to): 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).

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

The surgery will involve a general anaesthetic so that you are asleep throughout the procedure. 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. Once the surgery is complete, the anaesthetic is reversed and you are woken up and taken to the recovery room. X-rays are performed the following day to ensure adequate placement of the hardware.

DISCHARGE

Most patients go home 5-7 days after surgery. You will be reviewed by the physiotherapist to determine suitability for discharge. You must also be able to eat, drink and go to the bathroom prior to discharge. The pain should be easily controlled with tablet painkillers. You should discuss with your surgeon when to resume any blood thinning medications which have been stopped for the surgery. In some cases, it is necessary to have some rehabilitation before going home. This will be organised during your hospital stay.

You should continue with regular gentle exercise on discharge as well as any exercises given to you by the physiotherapist. You should avoid activities such as heavy lifting, moving objects, bending or twisting, prolonged sitting or standing. You should not swim for 3 weeks after surgery.

You may drive when you are no longer taking narcotic pain pills and can turn your head adequately to check your blind spots. Limit driving to short trips and slowly increase your driving time. You may need to make plans to be off 2-6 weeks depending on the work you do. Heavy lifting may not be allowed for 12 weeks.

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.

Your wound will be healed within two weeks from your surgery unless there has been some reason to delay that healing. In addition people 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, you should see your family doctor immediately.

FOLLOW-UP

You will need to be seen again by your surgeon 6 weeks after surgery with a neck X-ray. X-ray imaging is performed at set intervals after the surgery to ensure adequate fusion is taking place.