



Operation Information

Laminectomy

Introduction

Spinal stenosis occurs when the space around the spinal cord narrows. This puts pressure on the spinal cord and the spinal nerve roots, resulting in pain, numbness, or weakness below the diseased level.

Laminectomy is a surgical procedure that removes hypertrophic bone spurs and ligaments that are compressing the nerves. This operation is usually referred to as “posterior decompression”. It may be done along with other surgeries such as discectomy and/ or spinal fusion at the same time as needed.

This surgery is indicated when the patient has significant numbness, weakness, or pain that interferes with his/ her daily living while non-surgical treatments fail to ease the problems.



Source:
<https://assets.yourpractice.online/2259/3d-images/lumbar-laminectomy.jpg>

Expected Outcomes

It is expected that symptoms of spinal cord/ spinal nerve root compression are relieved and the nerves start healing and functioning better. The exact procedure to be performed shall be individualized and the expected outcome may vary.

Procedures

1. The operation is performed under general anaesthesia.
2. A small cut is made at the midline of the back at the diseased level.
3. The skin, paraspinal muscles and ligaments are retracted to one side.
4. Bone spur and hypertrophic ligaments that are compressing the nerve are removed under microscopic view.
5. Adequate decompression of the nerve is ensured.
6. The wound is closed with stitches or staples, and covered with a sterile waterproof dressing.

Possible Risks and Complications:

1. General Risks and Complications:
 - Excessive bleeding (seldom occurs) causing shock, stroke, heart attack, etc.
 - Deterioration of pre-existing medical problems, e.g. heart disease and stroke
 - Venous Thromboembolism (<0.5%)
 - Delayed wound bleeding, haematoma (0.5-1%) and wound infection (2-3%)
 - Wound dehiscence (<0.5%) or persistent scar discomfort
2. Risks and Complications Specific to the Surgery:
 - Neurological deterioration. Depending on the operative site, the most serious neurological complication is tetraplegia (in cervical spine surgery), paraplegia or cauda equine syndrome (in thoracic spine or lumbosacral spine surgery). The patient may lose the ability to breathe

with tetraplegia. The motor, sensory, autonomic, urinary, bowel and sexual functions may be altered.

- Injury to the dura (10%) will be repaired intra-operatively if encountered.
- Post-operative cerebrospinal fluid leakage (1-2%) or meningitis
- Incomplete relief of symptoms, deterioration of the original spinal condition or relapse of symptoms (10-15%)

** The risks listed above are in general terms and the possibility of complications is not exhaustive. Please understand that even though all operations are carried out with utmost professionalism and care, this does not rule out the possibility of complications from arising. In the event of peripheral organ damage or post-operative haemorrhage or leakage, further operations may be required.

Pre-operative Preparations

1. Good hygiene can prevent surgical wound infection. Therefore, we advise you to clean up yourself on the day of the operation.
2. The procedure and possible complications will be explained by the doctor and a consent form must be signed prior to the operation.
3. Please inform your doctor and nurse all your past medical history, previous surgical operations, current medication and any complication with drug or anaesthesia.
4. Cigarette smoking may reduce your ability to heal. We strongly recommend you quit smoking.
5. Routine tests such as blood tests, ECG, X-ray, CT scan and MRI scan may be performed.
6. Preparation of an external supportive device for spine immobilization after surgery, e.g., neck collar, thoracolumbosacral orthosis may be needed.
7. Nursing staff will assist you in cleaning the skin and performing shaving if necessary.
8. No food or drink six hours before the operation.
9. Please change into a surgical gown after removing all belongings including undergarments, dentures, jewellery and contact lenses.
10. Please empty your bladder before the operation.

Post-operative Instructions

General

1. After general anaesthesia, you may:
 - experience discomfort in the throat after tracheal intubation.
 - experience side effects of anaesthesia including feeling tired, drowsy, nausea or vomiting.Inform the nurse if symptoms persist or worsen.
2. Proper pain relief treatment will be prescribed by the doctor. Please inform nurse if you experience severe pain.
3. If there is an indwelling urine catheter inserted, it normally will be removed within a few days.
4. You will stay in hospital for a few days after the operation.

Wound Care

1. Keep the wound dry and clean. Follow the doctor's and nurse's advice on wound care.
2. If wound drain is present, it will be removed in 2-3 days after operation.
3. Stitches will be removed in 2 weeks or dissolved in 3 weeks.

Diet

Diet is allowed gradually after recovery from anaesthesia. (Please follow doctor's instruction)

Activities

1. Early mobilization helps speed up your recovery. Your doctor and physiotherapist will advise you on bed mobilization and back exercise as soon as the anaesthesia has weaned off.
2. Slowly increase your activity. No sports, aerobic or cardio activities until 4-6 weeks post-operative visit with your surgeon.
3. Heavy lifting (greater than 10lb), awkward twisting and leaning should be avoided for 3 months.
4. Use a straight-back chair to ensure proper back support. Avoid sitting for more than 30 minutes without mobilization. You may increase your sitting time gradually.
5. Lie only on a firm mattress, no couches or recliner chairs.
6. Put on the external supportive device as advised.

Advice on Discharge

1. Comply with the medication regime as prescribed by the doctor.
2. The wound may be still covered with waterproof dressing when you are discharged. Do not remove it and keep it clean and dry.
3. Immediately consult doctor or return to hospital for professional attention in event of excessive bleeding, severe pain or signs of infection at your wound site such as redness, swelling, shivering, high fever over 38°C or 100.4°F, or any symptoms of deterioration of neurological function such as new numbness, tingling or weakness of limbs.
4. Any follow-up consultations should be attended as scheduled.

Should there be any enquiries or concerns, please consult the attending doctor.

Under the professional care of the doctor, you will gradually recover. We wish you all the best during your treatment and recovery.

If you have any questions after reading the entire leaflet, please write them down in the spaces provided in order for the doctor to further follow-up.

Compiled by Union Hospital Operating Theatre (OT) Governance Committee

The above information is for reference only, please enquire your physician for details
Our Hospital reserves the RIGHT to amend any information in this leaflet without prior notification