The Cervical Laminectomy

Restriction of the vertebral canal

Top in Zorg.

You are admitted for a cervical laminectomy. This procedure is carried out when the vertebral canal is restricted near the cervical vertebrae.
In this folder you'll find information about the procedure and a few guidelines and pieces of advice which may help you to recover quicker.
Should you still have questions after reading this folder, please contact your consultant, nurse or an employee at the office.

What is a cervial laminectomy?

Our body has 24 spinal vertebrae: 7 cervical vertebrae, 12 thoracic vertebrae and 5 lumbar vertebrae. On top of that, we have the sacrum and the coccyx. All these vertebrae together make the vertebral column.

Vertebrae consist of a body and and a vertebral arch (lamina) with protrusions which hold the spinal canal. This canal surrounds the spinal cord, surrounded by fluids and meninges that protect it.
The spinal cord goes all the way down to the second lumbar vertebra. After that, it becomes a bundle of nerve roots, called the cauda equina.

Laminectomy is the removal of the (posterior) vertebral arch to create room for the spinal cord because the spinal canal has become too narrow. A cervical laminectomy takes place when the spinal canal restriction is near the cervical vertebrae.
The spinal canal usually becomes too narrow as a result of arthrosis – calcification. That is called a canal stenosis.

As a result of the restriction, the spinal cord becomes trapped, causing numbness and loss of strength in arms and legs.

Symptoms - complaints

Cervical canal stenosis causes the spinal cord to be compressed. That causes tingling and loss of strength in the upper limbs but these symptoms can also spread to the lower limbs which can cause trouble walking and ultimately, symptoms of paralysis.

Treatment

In case of cervical canal stenosis with medulla compression and spinal suffering, conservative treatment is of no or next to no use.

An operative correction shall, therefore, nearly always be needed.

Operation

By making a cut, typically about 4” long, at the back of the neck, the neurosurgeon can open up the vertebral column. After spreading the muscles on the centre line, they shall use the necessary equipment to remove the arch (lamina). It is quite possible this will need to be done for several vertebrae, so that the spinal cord is completely freed of calcification.
Before closing the wound, surgeons shall apply a wound drain which will collect any blood and fluids from the wound after surgery.

By widening the vertabral canal, pressure on the spinal cord will be relieved and complaints should disappear.
However, if the medulla compression is too far gone, it is possible that surgery does not solve all problems. Please discuss thoroughly with your consultant before surgery.

Surgery for cervical canal stenosis is meant to make symptoms disappear, but in some cases that does not happen.

Hospitalisation

The neurosurgery department has a hospital at the campus Aalst where people will make sure that your stay is as comfortable as possible. All rooms have bathroom, television, telephone and wifi.

Before admittance

It is possible you already have received an admittance document during the consultation or it was sent to you afterwards. This document is a summary of following information.

Some of the medication that you're taking must be stopped before an operation, specifically any anti-coagulation medication (Asaflow, Marcoumar, Marevan, Sintrom, Plavix, Xarelto, Pradaxa,…).

Stopping this medication and starting any replacements shall be discussed with your consultant and/or GP.

It is also of the utmost importance to tell people of any allergies you may suffer from, so that they can take the necessary precautions. Examples are: allergy against latex, contrast, certain medication, antibiotics, products or bandages… .

After your consultation with the Neurosurgeon, use the services within the hospital to prepare for your pre-operative investigations.
The pre-operative consultation will show what investigations will be needed, which can be: ECG, phlebotomy and/or RX thorax. The nurse will explain further during the pre-operative consultation.

At Aalst: between 8am and 5.45pm. Every day with and without appointment.

At Asse: between 9am and 5pm. Every day without appointment.

There is a letter box at reception where you can leave your personal data (pre-operative questionnaire/blue list) in case the desk is closed. They will then get in touch with you. Said questionnaire can be found in

'**the patients' booklet for surgery and interventional investigations'**.
You will receive that during the consultation, or it will sent to you by mail.

If you cannot do the pre-operative investigations here, you can also visit your GP and they will then decide what investigations you need. In that case, you

will have to bring the results of that consultation with you when you're admitted.
We would like to receive that questionnaire before you're admitted.

Also:

- Stop smoking
- Remove nail polish
- Do not take sleeping pills the night before surgery
- Avoid intake of alcohol

Admittance

Usually, you're admitted the day of the surgery. You need to be sober because you'll be fully anaesthetised. This means you must not drink or eat anything from midnight, unless otherwise decided by your consultant.
If you are the first patient on the day's planning, you are expected to be admitted the afternoon before.
The Neurosurgery – MKA department is on the fourth floor of the old building (A4).
First, you need to register at reception at X-2, where they will help you with all administrative issues. You can also ask them for a phone in your room, should you want that.

You need to bring the following:

- ID card
- Blood type and allergy cards
- Any forms regarding incapacity for work (the 'confidential') and/or hospitalisation insurance
- Personal items: pyjamas/night dress, dressing gown, slippers, toiletries, towels, washcloths, toothbrush, toothpaste, comb and shaving-set
- Certificates for certain medication
- Telephone nos. or address of family and/or neighbours
- Name, address, phone no. of your GP
- Recent X-rays: on a CD-rom or if images are available on the internet: code and reference
- Results/protocols of investigations already done, if you hadn't already brought them with you to the consultation

- Completed pre-operative questionnaire, if you haven't already given it to the pre-operative consultation (see 'patients' booklet for surgery and interventional investigations). Again, please make sure we receive it before you're admitted.

  ⇒ It is best to leave money and valuables at home!!

We shall take as much as possible into account your choice of room but because single rooms are the most popular ones, it will not always be possible to comply with your request. Also, take into account that for a single room an additional fee of 150% is charged.

The department's admittance manager shall point you to your room.
Preferably, any pre-operative investigations will have been done before admittance or you have brought the results with you.
Using a questionnaire, we shall check your medical history and discuss the pre-operative questionnaire.

May we also ask you please to remind your visitors of the visiting hours and to comply with them both for your benefit and the department's organisation.

Visiting hours on the ward
Every day continuously from 2pm to 8pm.

Operation's procedure / day of the operation

Before
Before surgery, you will be asked to put on a surgery gown, you keep your briefs on and we will check your ID bracelet again. It is best for you to go to the toilet too.

Then you will be given a little pill. This prepares you for the anaesthetic and shall make you drowsy.
Finally, you shall be taken in your bed to the operating theatre. From then onwards, it usually takes 4 to 5 hours before you're back in your room.

The ward will receive a phone call telling them you're expected at surgery. When that happens, depends completely on the operating room's planning.

The nurse on the ward cannot influence that, at all. Please, take also into account that the order of planned surgeries can change.

Operation
In the operating room you'll get a drip inserted in your arm with which you will be anaesthetised. You are positioned perfectly on the operating table so that the neurosurgeon can do their job as smoothly as possible.

Afterwards
After the operation, you will be taken to a recovery room where you need to spend a few hours. When you are stable again, wide awake and have no more pain, you can return to your room. It is the anaesthetist who will decide.

When you're back in your room, the nurse will explain to you how to get in and out of bed. The first few times you're getting out of bed, you'll always be supported by a professional care assistant.

Always try to turn around "en bloc", i.e. so that shoulder and hip turn at the same time, leaving the vertebral column straight. The nurse will teach you how to do it. Try and change your position regularly (from the left to the right and vice versa) and also move your arms as much as possible to keep the blood flowing smoothly. We advise you to limit yourself to walking around in the room when getting out of bed in the first few hours.

You must not use the support next to your bed, to ensure you do not strain your neck muscles.

You mustn't leave your bed today. Therefore, you will have to use either a urinal or a bedpan if you want to go to the toilet. In the room, they will check if you have already had a pee and if not, it will be followed up. You need to have a pee at the latest 6 hours after surgery to avoid the bladder expanding too much. If you cannot pee, a catheter will be inserted.

Nurse shall regularly check your blood pressure, pulse and temperature and ask you in how much pain you are. You will give them a number between 0 and 10 whereby 0 is no pain at all and 10 means a lot of pain. Via the drip you will receive permanent painkillers. Please talk to a nurse should you still

experience pain. When you're admitted, you'll receive a brochure, describing how post-operative pain is relieved.

Bandages will also be inspected regularly. The wound drain will be monitored and usually removed the day after surgery.
You will be asked if you have normal feeling in your arms or legs and if you're feeling OK.

Eight hours after surgery, you'll be allowed to drink a bit of water and if this goes well and you do not feel sick, you will be allowed to have a light meal afterwards.

Recovery

The day after surgery, the nurse or health care assistant shall clean you up. Drip will stay in your arm until pain is under control.

The wound will be checked and cared for. On the first day, the wound drain is usually removed, if you have one. New bandages will only be replaced if that is necessary.

You need to stay in bed until consultant has seen you. It is they who decide how long you need to stay in bed for. If they decide you can get out of bed, the nurse or health care assistant will help you to the edge of the bed.

At midday, you will get an injection in the belly so we can prevent thrombosis. You will receive an injection every day for the duration of your stay. If you are taking anti-coagulant medication (Asaflow, Marcoumar, Marevan, Sintrom, Plavix), you can start taking it again, after discussions with the consultant. The same is valid for the painkillers you were taking before surgery. You can re-start taking any other medication without any problem.

From the second day onwards, you can either clean yourself up at the basin or take a shower. When showering though, avoid aiming the jet of water straight at the wound. Should you have any problems, you can ask for advice and tips from the ward's nurses.

Discharge

All being well, you can go home on the fourth or fifth day afyer surgery, but you must observe a period of rest (see advice).

Your consultant will complete the necessary certificates and also write a letter to your GP. You will need to come back for an appointment with your Neurosurgeon 3 to 4 weeks after surgery. After this meeting and in consultation with your consultant, you can start exercise with a physiotherapist coming to your place. If there are any problems, you can call the hospital sooner.

Do not forget to take your discharge letter and medication list home with you. You can pick these op at the nurses' station on the ward.

Advice

Wound care

If your bandages become wet, loose or dirty, they can be changed.
Stitches will be removed by your GP, 12 – 14 days after surgery.
You can take a shower with bandages on.
Keep them dry though. Do not take bath during the first three weeks and contact your GP in case of infection (pain, redness, heat, swelling, temperatures, shivering).
We advise you do not smoke because smoking has a negative effect on the wound healing. You can always ask your consultant for help with stopping smoking.

Pain / numbness

It is possible for pain in the arms to flare up a few days after surgery. There can also be some sensory disorders, especially if these already existed before surgery. Those are normal and shall gradually disappear.

Because of the pain, you'll often avoid making certain movements or doing certain activities. However, if you do that, your power, stamina and flexibility will decrease, negatively impacting on the pain.

When you start moving around or carrying out new activities, pain in the neck can increase at first. This temporary pain is normal and certainly not a sign of any damage.

Moving around doesn't only improve your general health, it can also decrease your neck pain and strengthen your back and neck.
Try and control your pain rather then the pain controlling you.

Get active again.
To become active again, immediately after surgery, shall reduce pain and improve movement of the neck.

Scientific research has proven that early movements improve the results of surgery. Bed rest and lack of movement can decrease the condition of the neck.

Pain in the neck and arms after back surgery is normal. That must not be a reason to not become active again, nor to postpone or reduce your activities.

Early revalidation, gradually increasing effort, will lead to a good result after neck and back surgery.

Advice for positions and general fitness
From the first day after surgery, you need to regularly change your position: lie down, sit on the edge of the bed, walk around a bit. Try and do this as relaxed as possible.

After cervical laminectomy your neck muscles will feel painful. You can only start moving them approximately three weeks after surgery, at the erarliest.

When at home, stay busy. Start doing something as soon as possible. Do some chores but avoid extension movements (like looking upward, for example) and extreme bending.

A collar can be used, if need be.

Lifting
After surgery on the cervical vertebral column, you are still allowed to lift. However, you need to avoid lifting above shoulder height and higher.

Medication
If you take anti-coagulants, you can start taking these again, after consultation with consultant. The same is valid for any painkillers you were taking before surgery. Any other medication can be taken again without any problem.

Driving the car
After surgery, do not drive the car until you feel fine.

Resume work
Try and get back to normal life as soon as possible, with the emphasis on getting back to work as quickly as possible.

When you can resume work needs to be discussed with the consultant, as different factors are at play.

Physiotherapy and sports
During check-up you can discuss with your consultant when/if to start physio. If yes, you can discuss with your therapist when to resume any sports. If not, you need to start slowly and carefully increase your efforts. Never force the issue and, preferably, start with walking.
Do not do any intensive or contact sports until at least 3 months after surgery.

Also
No problems whatsoever in terms of sexual intercourse.

Possible complications
Every procedure can have complications. These will be discussed with your consultant. All precautions will be taken to prevent them and that is why they are very rare.

Presentation of the team

A group of health care professionals are ready to make sure the procedure and everything that comes with it goes smoothly.

At the consultation you met the member of staff of the department neuro-surgery who will be carrying out the procedure. All consultants responsible for you on the ward will visit you daily and ensure everything goes smoothly.
All of the ward's nurses are responsible for looking after you, for giving you your medication and caring for your wound. They are your direct point of contact if you have any problems. They will be ably supported by a group of health care assistants.
The office employees will gladly help you with your administrative requirements.
Upon yours and/or the surgeon's request, we can also call on paramedics known on the ward: Sociale Services (post-operative revalidation), dietists, physiotherapists. They will visit you in your room.

Medical team

Dr. Martens Frederic – Head of Dept. frederic.martens@olvz-aalst.be
Dr. Lesage Geoffrey geoffrey.lesage@olvz-aalst.be
Dr. Kools Djaya djaya.kools@olvz-aalst.be

Head Nurse

Mevr. Joke Walraevens joke.walraevens@olvz-aalst.be
T. ward: 053 72 44 85

Office Manager

Mevr. Katrijn Bruyneel katrijn.bruyneel@olvz-aalst.be
T. office: 053 72 43 73

Our offices are permanently open between 8am and 5.30pm (except for Wednesday until 5pm.).

Campus Aalst, Asse, Ninove
T. 053 72 43 73
F. 053 72 41 71

Should you still have questions, please do not hesitate to contact us. We hope your stay is as comfortable as can be and wish you a speedy recovery!!

- ADMITTANCE with overnight stay

  KIND of procedure: .....

  DATE of admittance: .....

  TIME of admittance: .....

  SURGERY DATE: .....

  SOBER: YES/NO

  If sober, from midnight

  ESTIMATED LENGTH OF STAY: .....

OLV Ziekenhuis
Neurochirurgie
Campus Aalst

Moorselbaan 164
9300 Aalst

Contact

T. 053 72 43 73
F. 053 72 41 71

Email sec: neurochirurgie.aalst@olvz-aalst.be
Email A4 : ve.neurochirurgie-mka.aalst@olvz-aalst.be
www.neurochirurgie.be
www.olvz.be