

The Herniated Lumbar Disc

Hernia of the intervertebral disc





You are admitted for a herniated disc. This procedure is carried out to free up a trapped nerve.

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 herniated disc

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 and between every two vertebrae there is a disc. All these components together constitute our back from the head down to the pelvis.

The above-mentioned discs allow for movement between the vertebrae and also absorb all shocks when we walk or jump. Discs are actually oval in shape with a soft centre and concentric lamellae on the outside. These lamellae (or 'annuli') keep the inner soft core (or 'nucleus pulposus') in place. This soft core consists for the most part of collagen fibres and water, taken from the surrounding cover plates.

However, as we get older (from the age of 25!) this core becomes less supple and dries out (we shrink). The annuli surrounding it also become less elastic and under a heavy load small tears can appear in them.

That is when we can feel a lower back pain or 'lumbago'. These little tears can also be seen on a Magnetic Resonance scan of the back (MR LWK). They can lead to a larger tear which can cause the nucleus to nearly slip out of the disc. That protrusion will then push the disc onto the nearby nerves, causing not only lower back pain but also pain in the legs, called 'sciatica'.



Symptoms - complaints

It is not always clear what causes a hernia. Sometimes it can be caused by lifting a heavy load or because of an accident, but often there is no clear cuase. In most cases, there is first pain in the back, which then spreads sometimes only to the leg, but often to the foot.

If this pressure becomes any higher, sensory disorders and symptoms of paralysis can be seen, because the nerve root has two functions: one for the sensory functions and one for the muscles.

Hernias mostly start in the lower lumbar vertebrae, which makes sense: the body's centre of gravity is before the fifth lumbar vertebra (L5) and therefore, all forces meet at the bottom. The most common levels are L5-S1 (i.e. between the lowest lumbar vertebra and the sacrum), followed by L4-L5 (fourth or one before last and fifth) and L3-L4. They are less common higher up.

Treatment

In most cases, we shall not be able to treat the patient surgically but rest, medication and maybe an epidural infiltration can help.

Operation may be needed when:

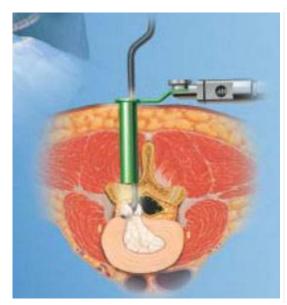
- There is persistent pain lasting several weeks or there is pain which cannot be cured, even with strong painkillers
- Paralysis symptoms.
- Sensory disorders in the loins and problems when peeing (this is called the cauda equina syndrome and is a surgical <u>emergency</u>)

Operation

A procedure with minimal invasion is preferred. We aim to remove the herniated disc to relieve pressure on the nerve by making a wound as small as possible.

The **'microscopic disectomy'** is the 'golden standard' for lumbar disectomy. This can usually be done with 'micro tubes'.





A small incision in the skin, no more than 16 to 20 mm, will help to gradually widen the back muscle until the work canal, a tube (as you see in the picture to the left) lies next to the vertebral arch. In other words, muscle fibre is gradually split and not cut. Then we apply an endoscope or do surgery with a microscope: the vertebral canal is opened and we use special pliers to remove the hernia.

The advantages of this procedure are obvious: there is less pain because there is only a small incision. Therefore, stay in hospital is shorter (usually 1 night) and people can go back to work quicker, definitely for work that doesn't stress the back too much.

Hospitalisation

The neuro-surgery 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 internet connection.

Before admittance

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, products or bandages....

After your consultation with the Neurosurgeon, use the services within the hospital to prepare for your <u>pre-operative investigations</u>.

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 <u>Aalst</u>: between 8am and 5.45pm. Every day with and without appointment.

At <u>Asse</u>: between 9am and 5pm. Every day without appointment.

There is a letter box at reception where you can leave your personal data (preoperative 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.

OV Top in Zorg.

Also:

- Stop smoking
- Do not take any sleeping pills the night before surgery
- Remove nail polish.

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 and/or hospitalisation insurance (AssurCard)
- 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 preoperative 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 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 because of emergencies, equipment sterilisation and the like.

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.

After

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.

For the first few hours, it will be best for you to remain lying on your back to put pressure on the surgery wound. When you're back in your room, you can switch positions regularly, approximately two hours later (left and/or righthand side) and it is also best for you to move your legs as much as possible to keep the blood flowing well.

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. After 4 hours in your room, the nurse or health care assistant shall explain how to get in and out of bed. The first few times you get up, you must <u>always</u> be supported by a health care assistant.

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

When you get up, nurses will always check if you have had a pee already. If that's not the case, they will guide you to the toilet. If you cannot pee, a catheter will be placed. You need to go to the toilet within 6 hours after the operation to avoid the bladder expanding too much.

A 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.

Your bandages shall also be checked regularly. It is quite possible you are wearing wound drainage (Redon). That shall be inspected thoroughly and usually removed the day after the operation.

Nurses will ask you if you can move your arms freely and if you're feeling well.

As of four hours after the operation, you'll be allowed to drink a bit of water. If this works out alright and you're not being sick, you'll be allowed to have a light meal.

Recovery

The day after surgery, you can clean yourself up either by taking a shower or having a wash at the basin. 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.

The wound shall be checked and, if need be, tended to. The new bandages can remain in place until the steristrips or stitches have been removed by your GP. That usually takes place 10 days after surgery.

Discharge

Most people go home the day after surgery but need to 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

Getting out of bed

When getting out of bed, try and use this technique, which will save your back:

- Pull up your legs when you're still on your back
- Then, in one fluent move, go and lie on your side with your legs pulled up
- Then push yourself up with your hand into a sitting position
- Remain in that position on the edge of your bed, and relax
- When you get up, distribute your weight over both your legs
- Walk around relaxed.

Wound care

If your bandages become wet, loose or dirty, they can be changed but the steristrips must stay. You can take a shower while wearing the bandages but do try and keep them dry.

Do not take a bath for the first 3 weeks. Contact your GP in case of infection symptoms (pain, redness, heat, temperature, swelling, 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

Pain in the leg can flare up a few days after surgery. Sometimes there are some sensory disorders, especially if these already existed before surgery. These will gradually improve.

Medication

If you have anti-coagulation medication at home, you can restart taking them, after discussions with your consultant. The same is true for the painkillers you were taking before surgery. You can restart any other medication you have at home without any consultation.

Lifting

Do not lift any weights heavier than 11lbs. up to 3 months after surgery. When lifting -> bend your knees and distribute your weight evenly when coming back up again.



Driving the car

Do not drive your car for three weeks after surgery or until you are feeling fine.

Resume work

By mutual consent, surgeon will decide when you can resume work.

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

You can have intercourse again, if you're not in any pain. Sunbeds or sunbathing is allowed, but do cover up the wound.

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 neurosurgery 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. F. Martens (Head of Dept.) frederic.martens@olvz-aalst.be Dr. G. Lesage (permanent member of staff) geoffrey.lesage@olvz-aalst.be Dr. D. Kools (permanent member of staff) djaya.kools@olvz-aalst.be Pagina 13



Head Nurse

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

Office Manager

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

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
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KIND of procedure:	
DATE of admittance:	
TIME of admittance:	
SURGERY DATE:	
SOBER:	YES/NO
If sober, from midnight	
ESTIMATED LENGTH OF S	STAY:





OLV Ziekenhuis Neurochirurgie

Campus Aalst Moorselbaan 164 9300 Aalst

Contact

T. 053 72 43 73 F. 053 72 41 71 Email sec: <u>neurochirurgie.aalst@olvz-aalst.be</u> Email A4: <u>ve.Neurochirurgie-MKA.Aalst@olvz-aalst.be</u> <u>www.neurochirurgie.be</u> <u>www.olvz.be</u>

