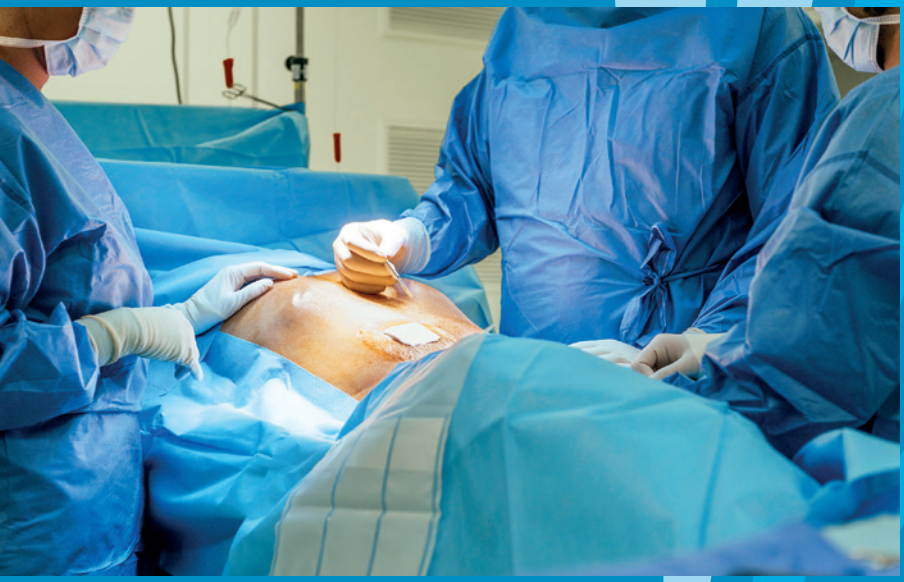
UZ LEUVEN



Abdominal surgery: colorectal surgery

Patient Information

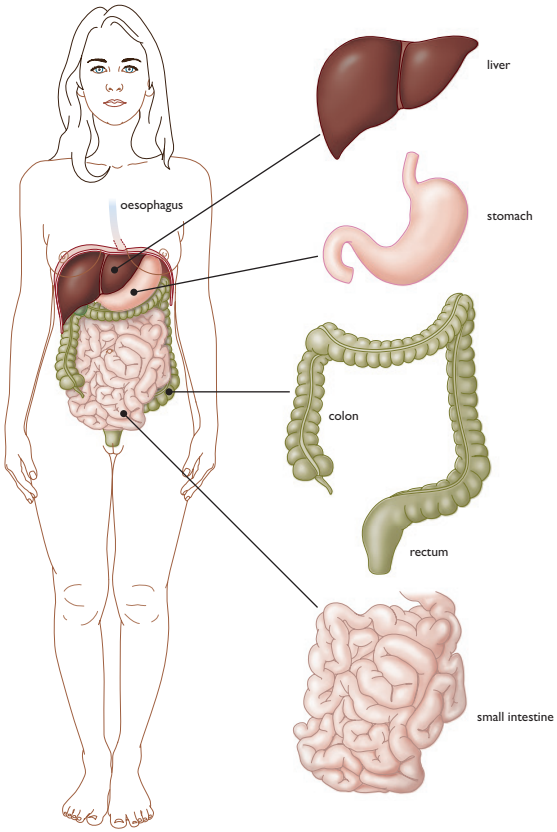
Introduction

This information brochure was developed by various members of staff of the abdominal surgery unit at UZ Leuven specifically for patients undergoing colorectal surgery. The unit would like to provide you (and your family) with as much information as possible concerning your planned admission to hospital. Please take your time to read this brochure in detail. It provides all the information you require to properly prepare for the operation and actively promote your recovery. The content of this brochure is for guidance purposes only and is not meant to replace professional advice from the doctor in charge of your treatment. Please do not hesitate to contact your doctor should you have further questions regarding the planned intervention.

Remember to bring this brochure with you every time you visit the hospital..

WHAT IS THE ABDOMEN?

The abdomen or abdominal cavity contains organs that, amongst other things, manage the digestion. The digestive system runs from the mouth to the anus and comprises the oesophagus, stomach and small intestine where the food is digested. Nutrients are then absorbed into the blood stream. Any food residue moves from the small to the large intestine or colon, where it is processed into stools.



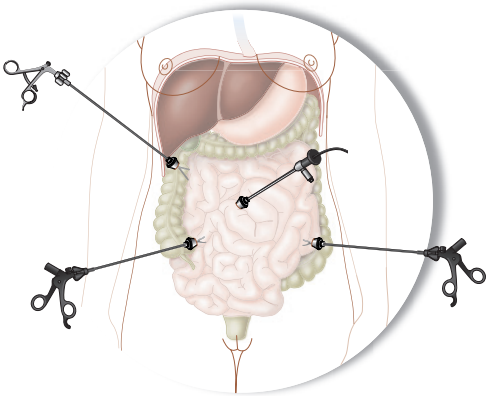
The pancreas produces digestive juices and hormones. The gall-bladder is also part of the digestive system and is attached to the lower part of the liver. It stores bile which flows via the bile ducts to the intestine. Bile originates from the liver, which is located on the right hand side in the upper abdomen.

WHAT IS ABDOMINAL SURGERY?

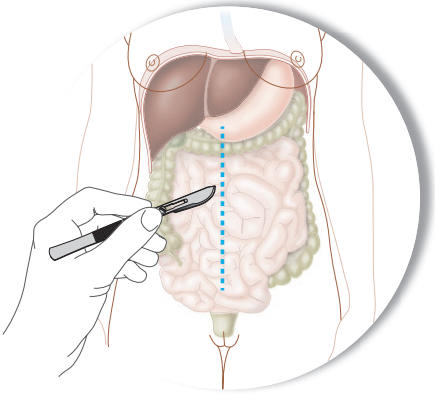
The surgeons at the abdominal surgery unit perform abdominal operations, which involve the above mentioned organs. Abdominal operations can be performed using two different methods: a laparoscopy or a laparotomy.

LAPAROSCOPY OR KEYHOLE OPERATION

During a laparoscopy four to six tiny incisions are made into the abdominal wall to gain access to the abdominal organs. By injecting a harmless form of carbon dioxide (CO_2) into the abdominal cavity space is created to perform various abdominal interventions using a camera and small instruments. In most cases the organ in question is freed within the abdominal cavity and then removed from the cavity or abdomen via a small incision. This kind of intervention has less impact on the body and promotes a more rapid recovery. In some cases the entire operation can be performed via these tiny openings.



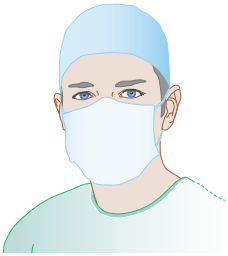
laparoscopy



laparotomy

LAPAROTOMY OR OPEN SURGERY

During a laparotomy the surgeon will make a larger incision into the abdomen in order to perform the operation. Usually this will be a lengthways incision along the navel.



Remember: there are many different types of abdominal operations. The type of operation depends upon the nature of the disease and the location of the abdominal abnormality.

With a colorectal operation you will participate in an accelerated recovery programme, i.e. ERP or 'Enhanced Recovery Pathways'. This care programme aims to ensure that you recover better and more quickly following the operation, with a lower risk of complications and a minimal stay in hospital.

You will play an active part in your own recovery. For example, you will be expected to start eating, drinking and moving around quite soon after the operation. Your recovery will be actively stimulated and your general condition supported in combination with appropriate pain management. To achieve this you will be assisted by a team of staff members, including a surgeon, anaesthetist, nurse, ward doctor, physiotherapist, dietician, social worker, study coordinator and project assistant, as well as your GP.

UZ Leuven is a training centre. In addition to our permanent medical staff we have senior assistants, who are already qualified surgeons, and assistant doctors in training (ASOs). Every day a ward doctor (ASO) and specialist nurse will do the rounds on the ward.

Any information is digitally processed in the care module and there is ongoing consultation with the permanent medical staff and senior assistants. This ensures that the surgeon in charge of your treatment is continually kept up to date of your recovery following the operation. An extensive briefing session is held at the unit every Wednesday afternoon.

Our hospital is also heavily involved in clinical research, which is why our study coordinator, Isabelle Terrasson, may ask you to participate in a specific study project. Obviously, this is without obligation. You will be provided with any necessary information for each study project and you will have to sign an informed consent form.

There are also frequent contacts between the various teams at the unit and the outpatient centre (consultation, stoma care, manometry, monitoring of clinical studies, etc.). This should ensure that you are seen by the same people at consultations and during your admission to hospital.

To continually improve the care we provide we would value, and will try to take into account, any comments you might have.

The entire team of paramedics, nurses and doctors wish you a speedy recovery following the operation.

WHO IS WHO?

The surgical team (telephone secretariat: +32 16 34 42 65)

Head of Department:
Prof. Dr. Andre D'Hoore

Assistant Clinic Manager:
Prof. Dr. Albert Wolthuis

Assistant Clinic Manager:
Dr. Gabriele Bislenghi

Senior Nurses

Senior Nurse
E 444-E 445:
Ingrid Vandessel
(tel. +32 16 34 44 43)

Senior Nurse
E 447:
Laura Vanlandewyck
(tel. +32 16 34 44 73)

Assistant Senior Nurses E 444-E 445

Sandra Verdonck
(tel. +32 16 34 44 53)

Sofie Geerts
(tel. +32 16 34 16 40)

Nursing specialists

Julie Pierrart
(tel. +32 16 34 29 22)

Lotte Vanholzaets
(tel. + 32 16 34 29 22)

Stoma Care Team

Anita Van den Bosch
(tel. +32 16 34 42 31
of +32 16 34 37 75)

Anouk Ausloos
(tel. +32 16 34 37 75)

Elisa Argos
(tel. +32 16 34 37 75)

Hans De Greef
(tel. +32 16 34 37 75)

Preoperative preparation nursing staff

Wendy Nys
(tel. +32 16 34 28 09)

Joyce Meuwis
(tel. +32 16 34 28 09, on Mondays from 09.00 to 17.00 hrs and on Tuesdays from 09.00 to 13.00 hrs)

Paramedic team

Dieticians:
Yasna Overloop
(tel. +32 16 34 13 95)

Marie Van Broekhoven
(tel. +32 16 34 22 85)

Social worker:
Kelly De Coster
(tel. secretariaat
+32 16 34 86 20)

Study coordinator:
Isabelle Terrasson
(tel. +32 16 34 08 37)

Physiotherapist:
Tine Vanderheyden
(tel. +32 16 34 05 63)

Case Manager:
Lynn Debrun
(tel. +32 16 34 14 58)

SURGERY AND ANAESTHESIA CONSULTATION

Your operation will be discussed with your surgeon first.

You will then proceed to an anaesthesia consultation, where the anaesthetist will discuss all aspects of anaesthesia and pain management with you. You will first need to complete a questionnaire. The anaesthetist will then check your medical history and medication list with you. If necessary, further examinations may be planned. Please do not hesitate to raise any questions you may have concerning anaesthesia and pain management.

PREOPERATIVE SURGERY CONSULTATION

Finally, you will visit the preoperative consultation unit, where your dossier will be checked to ensure that it is complete. This will also include running through a questionnaire and a number of practical aspects.

PREPARATIONS FOR THE OPERATION

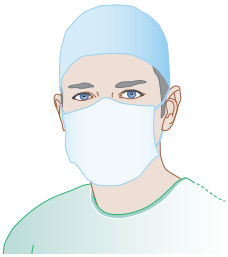
It is advisable to plan some aspects in advance to prepare for your operation. For example, you will have to arrange transport to and from the hospital when you are going home. You will be allowed to

go home once you are able to walk around, although some assistance may be welcome. In the event of problems the hospital social services unit will be able to help. If so, remember to report this in good time (if necessary during the initial consultation) to ensure that any necessary measures can be implemented. The secretariat of the social services unit can be contacted on +32 16 34 86 20.

You may need assistance with:

- ✗ transport
- ✗ cooking
- ✗ hygiene: washing/shaving
- ✗ laundry
- ✗ household tasks
- ✗ pet care
- ✗ garden maintenance

If you smoke, we recommend that you stop smoking approximately three weeks before the operation. The easiest way is to stop smoking on the day the operation is planned.



Remember: stopping smoking several weeks before the operation can considerably reduce breathing problems following the intervention. This can accelerate the healing process and reduce the risk of infection.

HOW LONG WILL YOU HAVE TO STAY IN HOSPITAL?

With laparoscopic colon surgery (large intestine) you will be able to go home after three days providing there are no complications. Following open surgery you will have to stay in hospital for approximately one week.

With laparoscopic rectal surgery (the final section of the large intestine) you will generally have to stay in hospital for 6 days. With open surgery you stay in hospital will be seven to eight days.

Obviously, each situation, operation and recovery process will be different. Our care programme primarily focuses on improving rather than accelerating your recovery. Depending on your recovery, the surgeon will decide together with you when it is safe for you to leave the hospital.

THE DAY BEFORE THE OPERATION

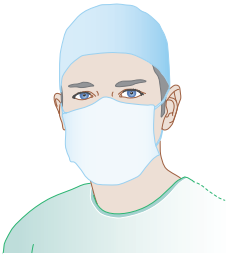
During the week before the operation (usually on a Thursday) the hospital admission unit will contact you to let you know the exact admission date/time. Remember though that the planning may change right up to the last minute due to emergency cases, operations taking longer than anticipated or a lack of available beds at the unit.

If you are unable to attend or are delayed on the day of the operation, please notify us as soon as possible (tel. abdominal surgery secretariat: +32 16 34 42 65).

If your operation is the first on the list for that day, you will have to come to the hospital the day before around 16.00 hrs. You will be notified of the admission date, the surgery date and the time of the operation by the admission unit.

THE DAY OF THE OPERATION

Have a bath or a shower and put on clean clothes at home before coming to the hospital. Do not use make-up or nail polish, remove artificial nails, do not use perfume, body lotion, aftershave or other skincare products.



Remember: waxing/shaving beforehand will increase the risk of wound infections. That is why the nurse at the unit will shave you after you have been admitted, or even in the operating theatre when you are anaesthetised.

On the day of your operation you need to register first at the registration desk in the reception hall, which is accessible via access Oost. The reception staff will be happy to deal with any questions you might have. You will then go to the unit at the agreed time, where you will be welcomed by the nursing staff. You may have to wait a while before you are allocated a room. During the admission procedure the nurse will again provide details of the planning.

The nurse will ask you various questions and will shave your abdomen. In most cases there's no need for a full bowel preparation. You can eat solid food until 6 hours before the operation and drink clear liquids until 2 hours before the operation, providing you are not suffering from diabetes mellitus. Clear liquids include coffee without milk, tea, apple juice, sports drinks, etc. Carbonated drinks, dairy produce and products containing pulp (orange juice) are not allowed. Once you arrive in hospital you will no longer be given solid food, but you can still consume sugary drinks until 2 hours before the operation. You will only be allowed to consume drinks offered by the nurses.

You will be given a hospital gown and will have to wait in bed until you are taken to the operating theatre. Valuables can be left behind in a locked cupboard in your room. The nurse will look after the key until you return to your room.

In the event of a change in the planning the senior nurse will notify you as soon as possible. If your operation is postponed you will be offered a sandwich based meal. As a patient you will of course still be able to have a hot meal in the visitors' cafeteria. The ward doctor will visit you to arrange a new date.

You can indicate your preference for a single or a shared room prior to your admission. Due to the limited number of single rooms you may in practice be allocated a different room from the one you requested.

Please remember to respect your fellow patients' peace and quiet. Obviously, the night nurse will have to provide the necessary care to your fellow patient(s). But peace and quiet will be maintained whenever possible.

WHAT SHOULD YOU BRING TO THE HOSPITAL?

- ✗ this information brochure
- ✗ your hospitalisation insurance card
- ✗ your identity card
- ✗ any medication you are taking
- ✗ a dressing gown and comfortable, loose clothing
- ✗ non-slip, well-fitting slippers or shoes
- ✗ earplugs
- ✗ your spectacles, preferably labelled and in a spectacle case
- ✗ your hearing aid(s)
- ✗ magazines and books
- ✗ toiletries such as towels, face cloths, toothbrush, tooth-paste, hairbrush or comb, deodorant and where applicable skincare products
- ✗ walking stick, walking frame or crutches, if you use them on a daily basis
- ✗ a CPAP machine for sleep apnoea if you use this at home
- ✗ easily digestible biscuits that do not have to be kept cool
- ✗ clear liquids
- ✗ if necessary a mobile phone, tablet, laptop (but beware of the risk of theft!)

WHAT SHOULD YOU DEFINITELY LEAVE AT HOME?

- large amounts of money and bank cards
- valuable items (e.g. jewellery)
- do not wear nail polish, artificial nails or piercings.

THE OPERATING WING

You will await your turn in the 'pre-operative holding area', where you will be fitted with a drip and an epidural catheter (epidural) if you need an epidural pain pump. When an operating theatre becomes available the nurse will collect and accompany you (in your bed) to the theatre. If you are the first on the list for the day all the preparations will be done in the operating theatre. The anaesthetist will then put you under anaesthetic. You will be woken up in the operating theatre when the operation is finished, but you will probably still be too drowsy to be aware of this. You will then spend some time in the PAZA (post-anaesthesia care unit) for observation.

PAIN MANAGEMENT

PAIN MEDICATION PUMP

The pump will be attached to your bed and will remain in place for one or more days following your operation.

Various pain medications are available to manage your pain, as well as different administration methods. You will decide in conjunction with your anaesthetist which option is the most appropriate for you. This will be discussed in detail during the pre-operative anaesthesia consultation.

Epidural

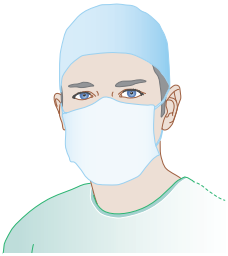
An epidural catheter is a very fine wire which the anaesthetist inserts into the back. It delivers pain medication via the catheter directly to the area around the nerves. After the operation the catheter is connected to a pump that you can control yourself (PCEA: Patient Controlled Epidural Analgesia). The pain pump will be removed after one, three or five days depending on the nature of the operation.

Intravenous administration

Pain can be managed using powerful pain medication which is administered directly via the blood stream. The medication can be connected to a pump which you can operate if you are in pain (PCIA: Patient Controlled Intravenous Analgesia). This PCIA pump injects the painkilling medication directly into the blood stream. It is connected to a vein in your arm or neck via a drip. This type of pump does not continuously administer medication. It only injects medication when the button is pressed. You can press the button whenever you are in pain. The pain pump is removed after one, three or five days depending on the nature of the operation.

Peroral administration

Pain is managed by administering medication under the tongue with a peroral pain pump. This type of pump is attached to the bed and you can activate it if you are in pain (PCOA: Patient Controlled Oral Analgesia). This type of pump does not continuously administer medication. It only injects medication when the button is pressed. The medication is quickly absorbed into the body via the mouth. This pain pump is available for 48 hours, following which other peroral medication is administered.

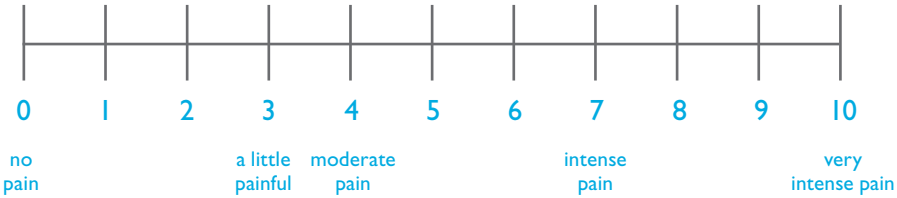


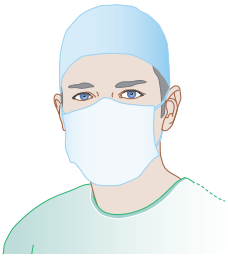
Remember: the advantage of a pain pump is that you can control your pain management yourself rather than having to call a nurse, which means that you can control the pain more quickly and more accurately. It takes about 5 to 15 minutes for the medication to take effect once you have pressed the button. It is advisable, therefore, not to wait until the pain becomes too intense before you press the button. You cannot give yourself an overdose. Visitors must not operate the pain pump. Once the pain pump is removed you will continue to receive other pain medication.

PERORAL PAIN MEDICATION

Once you are able to drink you will be given oral pain medication, i.e. pills or effervescent tablets. Various medications with different efficacy mechanisms are available. The nurse will check your pain score at regular intervals. Do tell them if the pain is not being

managed satisfactorily. A pain score can make it easier for you and the nurse to communicate. You can describe the intensity of the pain using a scale from 0 to 10, with10 being unbearable pain. Starting from a score of 4/10 your pain requires active intervention. The pain must be controlled to such an extent that you are able to move.





Remember: effective pain management will result in:

- ✗ less stress allowing your body to recover more quickly
- ✗ improved breathing and coughing up of mucus made easier
- ✗ comfortable mobilisation
- ✗ better sleep
- ✗ swifter recovery

PAZA (POST-ANAESTHESIA CARE UNIT)

You will be monitored by a nurse and an anaesthetist during your (brief) stay at the PAZA (post-anaesthesia care) unit. They will regularly check your pain levels and bandages. Visitors are allowed

in the PAZA unit between 19.45 and 20.00 hrs. Visits are limited to maximum two family members over the age of 16.

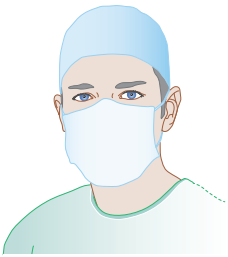
You may have been fitted with both a peripheral and a central catheter, i.e. an infusion tube inserted into a large neck vein whilst you were anaesthetised. You will also have been fitted with a bladder catheter, which diverts urine into a bag. This may be necessary because the epidural pain pump may have affected the bladder function. You may also be given supplementary oxygen via a nasal cannula. The insertion of a gastric tube and other drains to remove excess fluid from the abdomen or wound will be kept to a minimum. If they are used, they will be removed in the room later on.

THE UNIT

- ✗ The ward doctor will visit all patients every day. Ward doctors change every two weeks.
- ✗ A ward doctor is supervised by one of the permanent staff members of the abdominal surgery unit. If a family member would like to talk to the ward doctor or supervisor, a request can be made to the senior or coordinating nurse.
- ✗ On the day of the operation the nurse will help you briefly sit up on the edge of the bed. In the days following the operation you will have to sit up in a chair and start walking around as much as possible.
- ✗ Depending on the type of surgery, you may already be able to eat and drink a little a few hours after the operation. It is advisable to start eating as soon as possible.

- ✗ You should always sit up whilst eating, preferably in a chair with support from the nurse or family members/visitors.
- ✗ You will have to chew sugar free gum from day one, i.e. three times a day for approximately 5 minutes. This will stimulate the functioning of the intestine and will lead to flatulence.
- ✗ Tell the nurse if you feel nauseous or your abdomen is distended. If that is the case you will have to stop eating.
- ✗ Take enough exercise/move around.

Your intestine will stop functioning after an abdominal operation, which can make you feel nauseous and can sometimes induce vomiting. Pain medication also has a negative impact on the functioning of the intestine.



Remember: regular exercise reduces the risk of thrombosis (blood clot in a vein) and loss of muscle power.
Try to walk or cycle for fifteen minutes at least three times each day before your operation (using a home trainer).

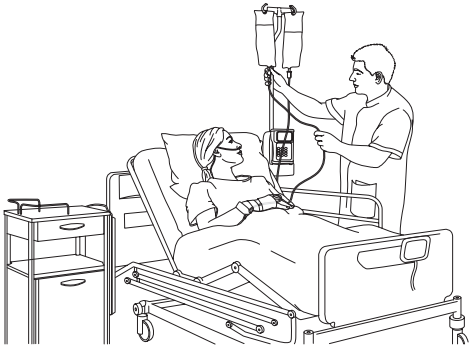
We also recommend doing the following leg and breathing exercises beforehand at home to ensure that they are routine by the time you are admitted to hospital. Both exercises should be repeated every hour on the ward.

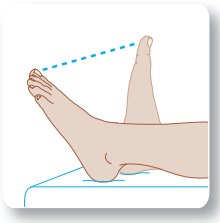
- Leg exercises

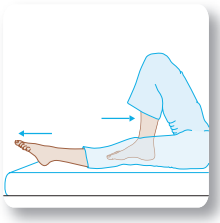
Whilst you are still bed bound you can still do limited leg exercises providing you make sure that you don't lift both legs at the same time (as this would put too much strain on the abdominal muscles).

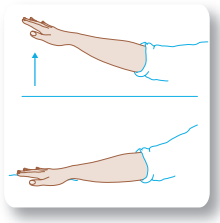
✔ Exercises lying down

- 10 x lifting and lowering your feet
- 10 x alternately bending and lowering the left and right leg
- 10 x alternately lifting and lowering the left and right arm









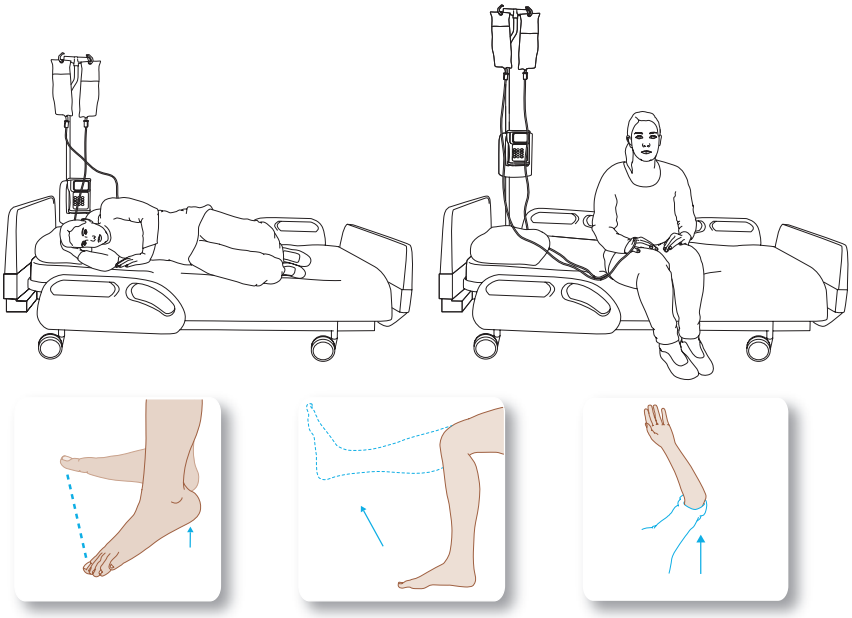
Walking around is surprisingly easy and not very painful compared to getting in and out of bed, because these movements put more strain on the abdominal muscles. Using the correct techniques, however, will makes things a lot easier.

- Moving to a sitting position from lying down

Bend your legs and turn fully sideways (lying sideways will minimise the strain on your abdominal muscles), the upper shoulder should no longer be in contact with the bed. Push up the upper body using the lower arm whilst lowering your bent legs out of the bed.

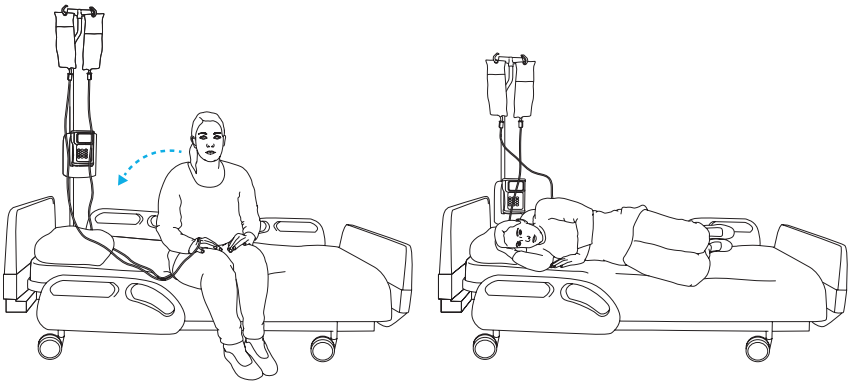
✔ Exercises in a sitting position

- 10 x alternately lifting the heels and toes
- 10 x alternately lifting the left and right leg
- 10 x alternately lifting the left and right arm



- Lying down from a sitting position

Sit down on the edge of the bed. Remember to sit close to the top end of the bed to ensure that you lie down high enough in the bed. Lower your torso sideways onto the bed so that you are lying sideways and simultaneously lift your bent legs onto the bed.

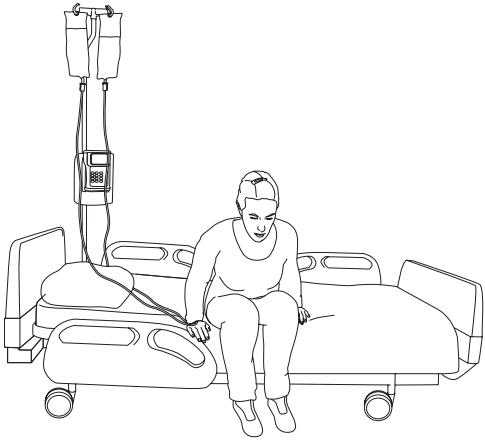


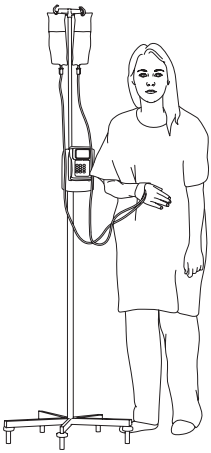
- Standing up from a sitting position

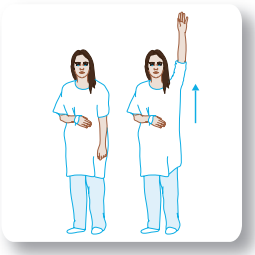
Move your shoulders forward so that they are in line with your knees. Tilt your weight forward as far as possible and use your arms to push yourself up on the armrest if possible.

✔ Standing exercises

- 10 x alternately lifting the left and right knee
- 10 x alternately lifting the left and right arm





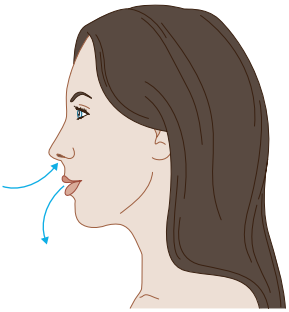


- Breathing exercises

Breathing exercises and coughing will help prevent pneumonia.

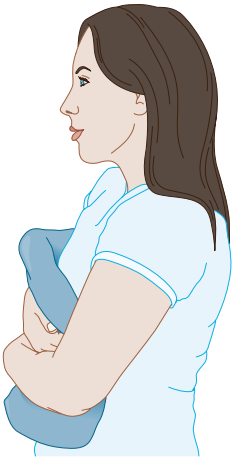
✔ Exercise 1: breathing in

Start by breathing in calmly and deeply through the nose. This will ensure that the air is able to circulate properly through the lungs. Briefly hold your breath to give the air time to circulate throughout the lungs. Now breathe out calmly through the mouth or nose.



✔ Exercise 2: coughing up mucus

To cough up mucus we teach you how to 'huff'. This means that you need to sigh forcefully as if you wanted to steam up a mirror. If the mucus is located high up in the airways it is advisable to first inhale deeply to introduce a lot of air behind the mucus, and then sighing forcefully. If the mucus is almost at the top, you should cough forcefully to try and remove the mucus fully from the lungs. Try to spit out the mucus into a tissue.



To reduce the pain during coughing and to protect your wound you can hold on to your abdomen using a cushion or blanket, pushing down firmly on your abdomen with both underarms and hands when you cough. It will also make you cough more effectively.

Do remember though that coughing may be painful. It is better to bring the mucus up slowly by inhaling deeply and sighing, until the mucus is high enough for you to expel it with a few powerful coughs. If you have difficulty raising the mucus leave it for about 15 minutes before trying again. If you are too tired you won't be able to cough effectively and consequently won't be able to bring up any mucus. If you are still using a pain medication pump you could activate it briefly before starting the exercises.

We have combined the main aspects in an illustration at the end of this brochure.

CHECKLIST BEFORE DISCHARGE FROM HOSPITAL

- You are no longer in pain when using oral pain medication.
- You are able to eat.
- You are sufficiently mobile and able to manage on your own.
- You don't suffer from nausea.
- You don't have a temperature.
- You are able to pass wind (producing stools is not a necessity).
- You are able to urinate spontaneously.
- You are able to get in and out of bed without assistance.
- You are able to walk again as you did before the operation, although not necessarily for long periods.
- You can manage the stairs at home without assistance.

- Someone is available at home to help if necessary. Try to arrange this before you are admitted to hospital.
- Ensure that any questions you may have concerning the operation are dealt with before you leave the hospital.

WHAT SHOULD YOU BE AWARE OF BEFORE YOU ARE DISCHARGED?

- ✔ Which medication will you have to take?
- ✔ Which prescriptions are needed for your new medication or, if applicable, stoma material?
- ✔ What can you eat and/or drink? A dietician will provide nutritional advice.
- ✔ How do wounds have to be treated? You need to know when the stitches can be removed, either by your GP or a home nurse.
- ✔ When you can recommence your (professional/hobby) activities?
- ✔ What are the symptoms that indicate that you should contact the doctor in charge of your treatment, your GP or A&E?
- ✔ Who can assist you at home? If you require home care you will need to be provided with appropriate prescriptions. You need to contact the home nurse.
- ✔ You will be able to leave the unit around 11.00 hrs on the day you are discharged from hospital.

AFTERCARE FOLLOWING YOUR STAY IN HOSPITAL

You can contact us at any time if you encounter a problem or have certain questions. You will be monitored at home by your GP and will obviously need several check-ups at the hospital afterwards. You will be given relevant appointments when you are discharged. A discharge letter will be sent directly to your GP and you will receive a copy to take home.

- ✗ It is definitely OK for you to be active at home and keep up reasonably routine activities.
- ✗ You will still tire quickly though. This usually lasts for about six weeks.
- ✗ You should feel comfortable at all times and increase any efforts gradually.
- ✗ You can usually start driving again a week after the operation unless you don't feel up to it.
- ✗ The doctor in charge of your treatment will tell you when you can return to work. This depends upon the nature of the surgery and the type of work you do.
- ✗ You can take a shower in the first week after the operation. After two weeks you can take a bath. There is no need to cover the wounds whilst showering.
- ✗ You must not lift more than 5 kg (e.g. half a bucket full of water, a washing basket, two shopping bags) during the first four weeks.
- ✗ Avoid stomach exercises for a period of four to six weeks.

Contact your GP, the doctor in charge of your treatment or even A&E:

- If you have a temperature (in excess of 38°C).
- If you start vomiting again or continuously feel nauseous.
- In the event of worsening redness, pain, wound discharge, wound odour.
- In the event of significant blood loss. Anal blood loss may persist for up to two weeks following abdominal surgery. It should, however, be limited.

USEFUL TELEPHONE NUMBERS

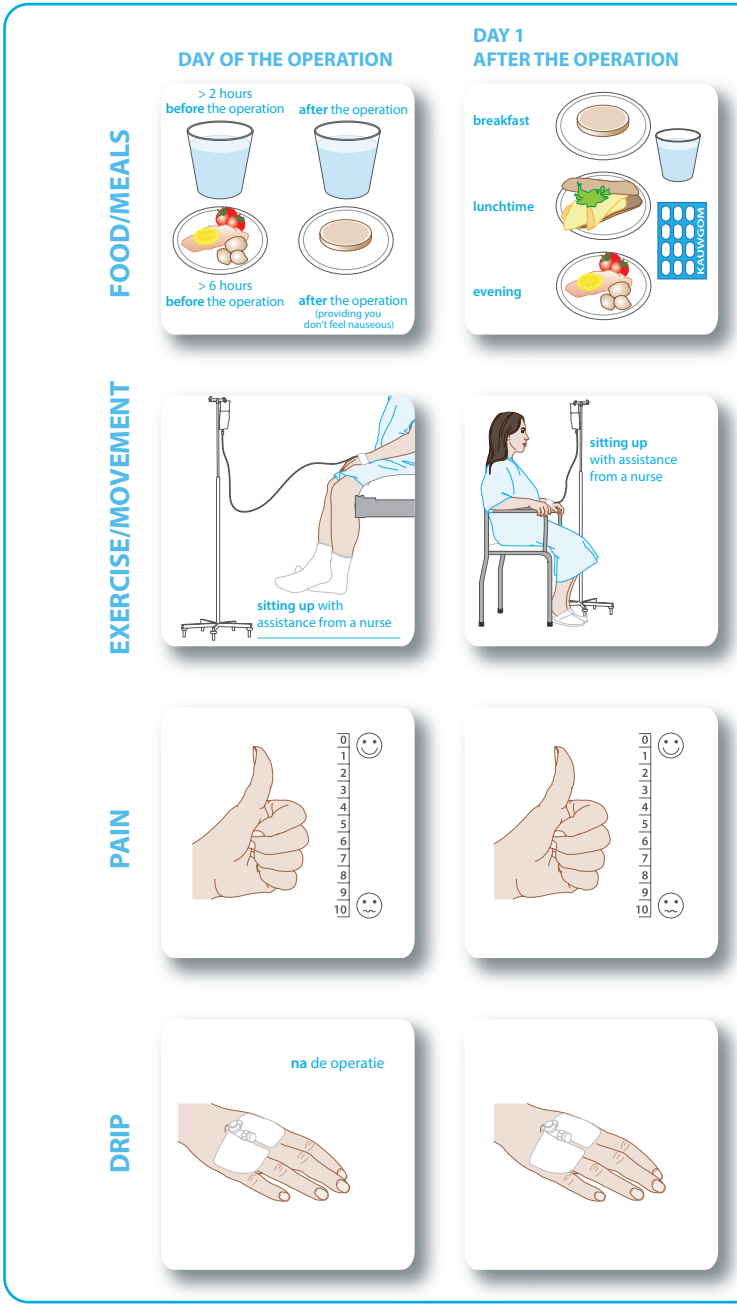
1. For stoma problems call +32 16 34 37 75 between 09.00 and 16.00 hrs. You will have a check-up consultation at the stoma unit one week after the operation. You will be given an appointment when you leave hospital.

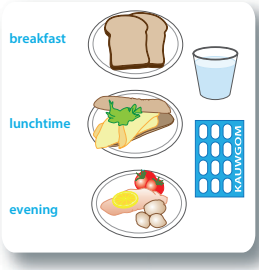
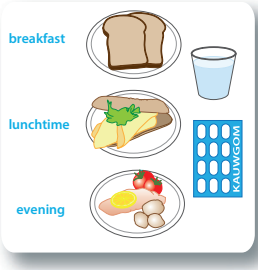
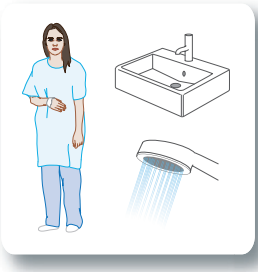
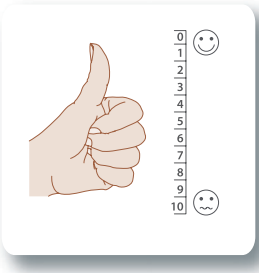
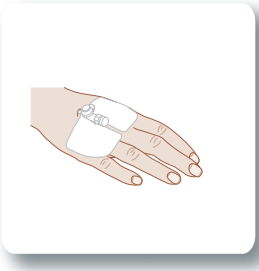
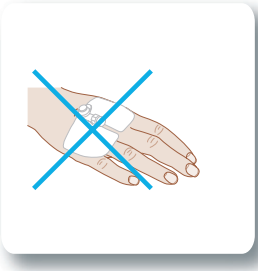
2. Doctor on call for abdominal surgery:
   +32 16 34 05 98.

3. During the night (from 20.00 hrs):
   +32 16 34 12 16.

SUMMARY

Summary illustration of what happens from the day of the operation



	DAY 2 AFTER THE OPERATION	DAY 3 AND THEREAFTER FOLLOWING THE OPERATION
FOOD/MEALS		
EXERCISE/MOVEMENT		
PAIN		
DRIP		

EVALUATION FORM

UZ Leuven would like to know your opinion on the care we provide. Your experience is important and helps us improve the quality and efficiency of our care services. That is why we kindly request that you complete our patient satisfaction survey, preferably on the day you leave the hospital. It will take approximately 8 minutes of your time and is totally anonymous.

The survey can be accessed via the interactive screen by your bed, using the 'my dossier' button. Should you have further questions you can always contact the nursing staff at the unit.

Thank you for taking the time to participate!

NOTES

NOTES

Design and Production
This text was composed by the Abdominal Surgery Unit in conjunction with the Communications Department.
Medical drawings: Myrthe Boymans (www.myrtheboymans.nl)

This brochure is also available at www.uzleuven.be/en/brochure/700757.

Comments or suggestions pertaining to this brochure can be submitted via communicatie@uzleuven.be.

Editor-in-Chief
UZ Leuven
Herestraat 49
3000 Leuven
Tel. 016 33 22 11
www.uzleuven.be

mynexuzhealth

Consult your medical record via nexuzhealth.com or

GET IT ON Google Play

Download on the App Store

700757_v102021