

HERNIA OF THE ABDOMINAL WALL (ABDOMINAL WALL HERNIA, UMBILICAL HERNIA, INCISIONAL HERNIA)

BRÜCHE DER BAUCHWAND (BAUCHWANDHERNIEN, NABELHERNIEN, NARBENHERNIEN)

Information and medical history for patients for preparation of the required pre-procedure interview with the doctor

Clinic / Doctor:



Patient data:

englisch



Procedure scheduled to take place on (date):



- Abdominal wall hernia surgery** conventional/open
- Umbilical hernia surgery** minimally invasive
- Incisional hernia**

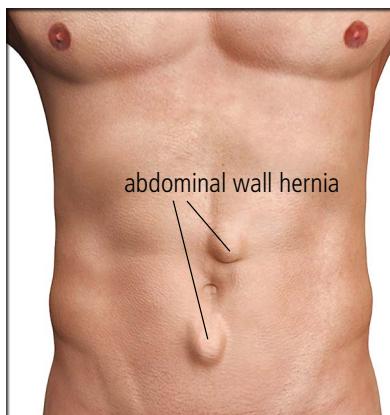
Dear patient, dear parents,

your doctor has diagnosed you with a fracture of the abdominal wall, a so-called hernia, and is recommending surgery.

This form will serve to prepare you for your pre-procedure interview with the doctor. During the interview, the doctor will explain to you what the scheduled operation involves and inform you of any related risks. The doctor will answer all of your questions in order to reduce any fears or concerns you may have. You may then consent to the procedure suggested to you. Your doctor will provide you with a copy of the completed and signed form after the interview.

STRUCTURE AND FUNCTION OF THE ABDOMINAL WALL

The abdominal wall is the lining of the abdominal cavity; its main function is to protect the organs situated inside the abdominal cavity. The abdominal wall consists of three layers. The surface layer consists of the skin and subcutaneous tissue with vessels and nerves. The middle layer consists of three different abdominal muscles and muscle fascia. The internal layer consists of connective tissue and the abdominal lining (peritoneum).



A gap in the abdominal wall, and in the muscles layers in particular, can lead to a turning outward of abdominal lining or even internal organs. This is then referred to as a hernia, a fracture of the abdominal wall. It consists of the hernial orifice, the hernial sac and the hernial sac contents.

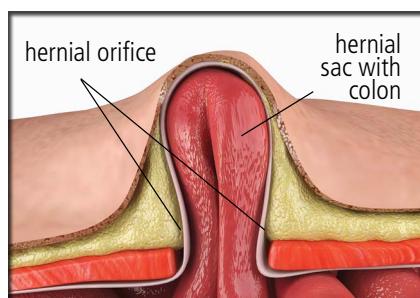
This gap may have been present from birth, it can form spontaneously or result from an operation; it is then called an incisional hernia.

Generally, any abdominal wall hernia should be repaired surgically, especially if it is causing pain, since protruding organs may become trapped in the hernia and be damaged. Smaller hernias are actually more dangerous than larger ones with regard to this. Abdominal wall hernias may also become larger, making it more difficult to repair them surgically.

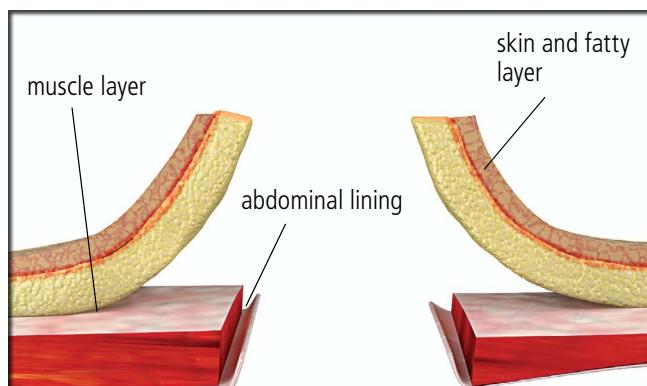
COURSE OF OPERATION

Surgical treatment of an abdominal wall hernia depends on its location, size and cause. There are different methods available.

The overall goal is retrocession of the hernial sac content, removal of the hernial sac and closing of the hernial orifice. Additionally, the abdominal wall will often have to be reinforced with a surgical mesh implant. There are different methods available for inserting the surgical mesh, either below or on top of the muscle layer, or even a combination of both if need be. If the gap is very large and cannot be closed directly, replacing the abdominal wall with surgical mesh or other material (such as tissue of animal origin) is also an option.



If internal organs have become trapped in the hernia, for instance the colon, and have already been damaged through a lack of perfusion, removing the damaged structures may become necessary.



The surgical access path is usually an abdominal incision, often directly through the hernia. Often, minimally invasive laparoscopy is also available as a surgical method.

Depending on the type and location of the hernia, a flexible

plastic tube may also be inserted as a surgical drain to drain fluids from the wound. Your doctor will inform you as to which type of procedure is suitable in your particular case and which procedure has been scheduled for you.

POSSIBLE ADDITIONAL MEASURES

If there are any additional findings during the operation, additional measures or changes in procedure may become necessary (for instance a larger incision, removal of a section of the colon).

Umbilical hernia surgery may require the removal of the navel under complicated surgical conditions.

If further findings requiring medical intervention are uncovered during the operation, it is often possible to treat them during the same procedure.

In order to avoid having to undergo a separate procedure at a later point in time, you can already agree to any necessary changes or additional measures now.

ALTERNATIVE METHODS

All alternative treatment methods, such as the use of a so-called hernia truss, do not constitute effective ways of treating a hernia.

You may forgo an operation, but that will always involve a risk of complications occurring.

Treating the hernia without inserting a mesh carries a higher risk of the hernia reappearing (recurrence). The implantation of surgical mesh, however, is accompanied by rare risks such as mesh infection, mesh shrinkage and foreign body reaction.

DIRECTIONS FOR PREPARATION AND AFTERCARE

Preparation:

Medication: It is important for you to inform your doctor of any medication you take or inject on a regular basis (in particular any anticoagulant agents such as Aspirin® [ASS], Marcumar®, Heparin, Plavix®, Xarelto®, Pradaxa® etc.). Your doctor will let you know if and for how long you need to stop taking your medication.

Aftercare:

Post-surgical pain can usually be alleviated with medication. You will be given additional pain medication if need be.

You should refrain from eating and drinking for at least 4 hours after surgery. After that period of time, diet progression can commence in accordance with your doctor's instructions.

To prevent new hernias (incisional hernias), please refrain from lifting anything heavier than 5-10 kilos for a period of 8-12 weeks after the operation.

The suture materials are usually removed 10-14 days after surgery. If the procedure is performed **on an out-patient basis**, it is necessary for an adult to come and collect you. Please also make sure there will be an adult at home to supervise you for the period of time recommended by your doctor. You must not actively participate in road traffic for a period of **24 hours after the procedure** (not even as a pedestrian) nor participate in any risky activities. You should also refrain from drinking alcohol and from taking any important personal or economic decisions during this period.

RISKS, POSSIBLE COMPLICATIONS AND SIDE EFFECTS

It is well known that **any medical procedure**, even a routine procedure such as abdominal hernia surgery, **is accompanied by certain risks**. If complications occur, they may sometimes require additional treatment or surgery and, in extreme cases, can sometimes even be **life-threatening** or lead to permanent

damage – even after some time. Please understand that, for legal reasons, any possible risks associated with this procedure must be listed, even if some of these only occur in exceptional cases. During the interview, your doctor will inform you of any risks specific to your case. You may also choose to waive a detailed explanation. In that event, please pass over this section on risks and confirm your waiver with your signature in the final section of this form.

Generally, any neighbouring structure within the surgical region (such as the colon, bladder, liver or stomach) is at risk of being injured during surgery. The omentum, the large as well as the small intestine may protrude into the hernial sac, in rare cases even the stomach or, depending on the location of the hernia, other organs as well. **Injury** of those organs is rare; however, it can lead to the formation of fistulas and adhesions requiring surgery in the long run.

If part of the intestine has to be removed, it may result in a **leakage** of the required **suture** in rare cases (anastomotic leakage). In extreme and exceptional cases, a **colostomy** may be required.

Through the retrocession of hernial sac content, **the pressure inside the abdominal cavity may increase** in case of severe hernias, leading to impaired blood circulation of the abdominal organs (compartment syndrome). Surgery to relieve the pressure involving the opening of the abdomen can then be required.

Infections of the surgical wound or at the site where injection needles were inserted, including syringe abscess, tissue death (necrosis) and scarring, rarely occur. In most cases, infections can be treated successfully with antibiotics; an abscess may have to be punctured. If a surgical mesh implant becomes inflamed, it may have to be removed in some cases. In rare cases, an inflammation of the abdominal lining (peritonitis) may occur or germs may be introduced into the bloodstream, leading to dangerous blood poisoning (toxaemia) or inflammation of the endocardium (endocarditis) as a result.

Allergic reactions (intolerance symptoms), for instance to medication (pain killers, sedatives) or to the mesh used rarely occur. Skin rash, itching, swelling or nausea and coughing may then occur as a result. They normally disappear without treatment. Severe reactions such as shortness of breath, spasms, tachycardia or circulatory shock are rare. Due to insufficient perfusion, temporary or permanent organ damage, e. g. brain damage, paralysis or kidney failure may occur even despite adequate intensive care.

Every operation involves a **risk of bleeding**. Most bleeding can be stopped immediately during the operation. On very rare occasions, postoperative bleeding may occur, requiring an additional surgical intervention at worst. Should severe blood loss occur, the use of donor blood/blood components (**transfusion**) may be required. This can lead to transmission of diseases, such as hepatitis in very rare cases (causing dangerous inflammation of the liver), HIV in extremely rare cases (causing AIDS), BSE (causing a form of Creutzfeldt-Jakob disease) or also of other dangerous – even unknown – diseases. The latter can also occur when implants of animal origin are used.

Damage to the skin, soft tissue or **nerves** (e. g. through injections, disinfectants, the use of electrosurgical instruments or despite proper positioning) is rare. Sensory disturbance, numbness, paralysis and pain may then result. They are usually temporary. Permanent nerve damage, tissue death or scarring occur very rarely.

The operation itself or the immobilisation afterwards can lead to the formation of blood clots (**thromboses**) in very rare cases. Such blood clots may then travel to other parts of the body and block the vessels of other organs (**embolism**). This may then

lead to e.g. lung embolism, stroke or kidney failure resulting in permanent damage despite proper treatment. Compression stockings, early mobilisation and anticoagulant agents (Heparin) are used to decrease the risk of thromboses. If Heparin is administered, it may result in severe coagulopathy (HIT) on very rare occasions. This means that the risk of thrombosis formation and thus obstruction of blood vessels is increased.

The injection of gas during minimally invasive surgery can lead to gas entering into a blood vessel (**air embolism**), or gas can enter into the chest and push aside the lungs (pneumothorax).

With patients predisposed to delayed wound healing or **wound healing disorder**, painful scarring and abnormal proliferation of scar tissue (keloids) may occur. This may require corrective surgery.

Important Questions for Outpatients

Wichtige Fragen für ambulante Eingriffe

Who will pick you up when you are discharged from the hospital/clinic/surgeon's practise? Wer wird Sie abholen, sobald Sie aus Klinik/Praxis entlassen werden?

Name and age of the person picking you up: [Name und Alter des Abholers]

Where can you be reached within the 24 hours after surgery?
Wo sind Sie in den nächsten 24 Stunden nach dem Eingriff erreichbar?

Street, house number, postcode, place: [Straße, Hausnummer, PLZ, Ort]

Telephone: [Telefonnummer]

Name and age of person looking after you: [Name und Alter der Aufsichtsperson]

Questions about Your Medical History

Please fill in the following questionnaire carefully before your information talk. **Please tick the applicable box!** It goes without saying that your information will be treated confidentially. The information you provide will help the physician to better assess the risks in your particular case, to advise you on the complications that could occur, and to take any steps needed to prevent complications and side effects.

Gender: M / F, **age:** _____ **years, weight:** _____ **kg, height:** _____ **cm**
Geschlecht: m / w, **Alter:** _____ **Jahre, Gewicht:** _____ **kg, Größe:** _____ **cm**

Information about medications:

Do you regularly require blood thinning medications (anticoagulants) or have you taken any or have any been injected during the past 8 days? yes no

- Aspirin® (ASS), Clopidogrel, Eliquis®, Heparin,
- Marcumar®, Plavix®, Pradaxa®, Ticlopidin,
- Xarelto®.

Angaben zur Medikamenteneinnahme: Benötigen Sie regelmäßig blutgerinnungshemmende Mittel oder haben Sie in der letzten Zeit (bis vor 8 Tagen) welche eingenommen bzw. ge-spritzt? Aspirin® (ASS), Clopidogrel, Eliquis®, Heparin, Marcumar®, Plavix®, Pradaxa®, Ticlopidin, Xarelto®.

Any other: _____
Sonstiges: _____

When did you take the last dose? _____
Wann war die letzte Einnahme?

Do you take any other medications? yes no
Werden andere Medikamente eingenommen?

The formation of **adhesions** may lead to protracted pain or dangerous **intestinal obstruction** even after several years.

The risk of a new hernia forming, a so-called recurrence, is always given, the implantation of surgical mesh lowers this risk.

The use of a mesh implant may lead to **foreign body sensation, pain or adhesion or inflammation of the mesh**, also sometimes affecting neighbouring organs. In severe cases, the mesh may then have to be surgically removed.



Who is your physician (the one whose care you are in/who referred you/family surgeon)? Wer ist Ihr überweisender Arzt / Hausarzt / weiter betreuender Arzt?

Name: [Name]

Street, house number: [Straße, Hausnummer]

postcode, place: [PLZ, Ort]

Telephone: [Telefonnummer]

(If certain answers are preselected, please correct them if anything has changed.)

If so, which ones: _____
Wenn ja, bitte auflisten:

(Please include non-prescription medications, herbal and other natural remedies, vitamins, etc.) (Auch rezeptfreie Medikamente, natürliche oder pflanzliche Heilmittel, Vitamine, etc.)

Have you ever had surgery on the abdomen? yes no

Wurden Sie schon einmal im **Bauchbereich** operiert?

If so, what surgery? _____
Wenn ja, welche Operation?

Were there any complications? yes no
Ergaben sich dabei Komplikationen?

If so, what complications? _____
Wenn ja, welche?

Do you have any metal implant (such as artificial hip)? yes no
Haben Sie ein Metallimplantat (z. B. eine künstliche Hüfte)?



(If certain answers are preselected, please correct them if anything has changed.)

Are you pregnant? not certain yes no
Sind Sie schwanger?

nicht sicher

Do you drink alcohol regularly?

yes no

Trinken Sie regelmäßig Alkohol?
If so, what and how much: _____
Wenn ja, was und wie viel:

Do you have or have you ever had any of the following diseases? Liegen oder lagen nachstehende Erkrankungen vor:

Blood diseases / blood clotting disorders? yes no

Increased bleeding tendency (e.g. frequent nose bleeds, increased post-operative bleeding, increased bleeding from minor injuries or after dentist treatment, stronger or longer menstrual bleeding), tendency to bruise (frequent bruising possibly for no particular reason).
Bluterkrankung/Blutgerinnungsstörung? Erhöhte Blutungsneigung (z.B. häufiges Nasenbluten, verstärkte Nachblutung nach Operationen, bei kleinen Verletzungen oder Zahnarztbehandlung, verstärkte oder verlängerte Regelblutung), Neigung zu Blutergüssen (häufig blaue Flecken auch ohne besonderen Anlass).

Do you have any blood relatives with signs of blood disease / clotting disorders? yes no

Gibt es bei Blutsverwandten Hinweise auf Bluterkrankungen/Blutgerinnungsstörungen?

Allergies / Oversensitivity? yes no

Medications, foods, contrast media, iodine, sticking plaster, latex (e.g. rubber gloves, balloons), pollen (grass, trees), anaesthetics, metals (itching caused by metal spectacles frames, jewellery, jeans buttons).

Allergie/Überempfindlichkeit? Medikamente, Lebensmittel, Kontrastmittel, Jod, Pflaster, Latex (z.B. Gummihandschuhe, Luftballon), Pollen (Gräser, Bäume), Betäubungsmittel, Metalle (z. B. Juckreiz durch Metallbrillengestell, Modeschmuck oder Hosennieten).

Any other: _____

Sonstiges:

Heart, circulatory or blood vessel diseases? yes no

Heart attack, chest pain and/or tightness (angina pectoris), heart defect, irregular heart rhythm, inflammation of heart muscle, heart valve disease, shortness of breath while climbing stairs, heart surgery (possibly with insertion of an artificial heart valve, pacemaker, defibrillator), high blood pressure, low blood pressure, stroke, varicose veins, inflammation of a vein, thrombosis, embolism.

Herz-/Kreislauf-/Gefäß-Erkrankungen? Herzinfarkt, Angina pectoris (Schmerzen im Brustkorb, Brustenge), Herzfehler, Herzrhythmusstörungen, Herzmuskelentzündung, Herzklappenerkrankung, Luftnot beim Treppensteigen, Herzoperation (ggf. mit Einsatz einer künstlichen Herzklappe, Herzschrittmacher, Defibrillator), hoher Blutdruck, niedriger Blutdruck, Schlaganfall, Krampfadern, Venenentzündung, Thrombose, Embolie.

Any other: _____

Sonstiges:

Diseases of the respiratory tract (breathing passages) or lungs? yes no

Asthma, chronic bronchitis, inflammation of the lungs, emphysema, sleep apnoea (intense snoring with breathing interruptions), vocal cord/diaphragm paralysis.

Erkrankung der Atemwege/Lungen? Asthma, chronische Bronchitis, Lungenentzündung, Lungenemphysem, Schlafapnoe (starkes Schnarchen mit Atemaussetzen), Stimmband-Zwerchfellähmung.

Any other: _____

Sonstiges:

Metabolic diseases?

yes no

Diabetes (sugar sickness), Gout.

Stoffwechsel-Erkrankungen? Diabetes (Zuckerkrankheit), Gicht.

Any other: _____

Sonstiges:

Do you take any diabetes medications?

yes no

insulin injections, drugs containing metformin (e.g. Glucophage®, Metformin®, Janumet®).

Werden Diabetesmedikamente eingenommen?

Spritzen (Insulin), metforminhaltige Tabletten.

Any other: _____

Sonstiges:

Kidney diseases?

yes no

kidney insufficiency, kidney inflammation, Kidney operations, Plasmocytoma, Kidney or ureter stones, Blood in the urine, Dialysis.

Nierenkrankungen? Nierenfunktionsstörung (Niereninsuffizienz), Nierenentzündung, Nieren-OP, Plasmozytom, Nieren- oder Harnleitersteine, Blut im Urin, Dialyse.

Any other: _____

Sonstiges:

Liver diseases?

yes no

Liver inflammation, Jaundice, cirrhosis.

Lebererkrankungen? Leberentzündung, Gelbsucht, Leberzirrhose.

Any other: _____

Sonstiges:

Communicable (contagious) diseases?

yes no

Hepatitis, tuberculosis, HIV.

Infektionskrankheiten? Hepatitis, Tuberkulose, HIV.

Any other: _____

Sonstiges:

Do you have a malignant tumour (cancer)?

yes no

Leiden Sie an einer Tumorerkrankung (Krebs)?

Are you receiving or have you received chemotherapy?

yes no

Erhalten oder erhielten Sie eine Chemotherapie?

Any other acute or chronic diseases / illnesses?

yes no

Nicht aufgeführte akute oder chronische Erkrankungen?

Please describe: _____

Bitte kurz beschreiben:

