

PLACEMENT OF FEEDING TUBE LEGEN EINER ERNÄHRUNGSSONDE

Information and medical history for patients in order to help them prepare for an interview with the surgeon

Klinik / Praxis:



Patient data: Patientendaten:

PEG

englisch

The procedure is planned for (date): Der Eingriff ist vorgesehen am (Datum):

Dear patient,

tube feeding is recommended in your case in order to provide an adequate intake of food and fluids. Since long-term artificial nutrition is planned, we recommend the feeding tube which will be put directly into the stomach from the outer side and through the abdominal wall.

We give you the following information in order to inform you and your family, if necessary about the course of the procedure, possible complications and measures of conduct before and after the procedure. This form should help you prepare you for the talk with the physician. During the talk, the physician will explain advantages and disadvantages of the planned procedure in comparison to alternative methods and risks which are specific for you, as well as possible complications. He/she will answer your questions in order to reduce your fears and concerns. Then you can give or decline consent to the proposed examination/treatment.

Please, read the following information and complete the form carefully. Your personal data will remain confidential. The physician will give you a copy of the completed and signed form after the talk.

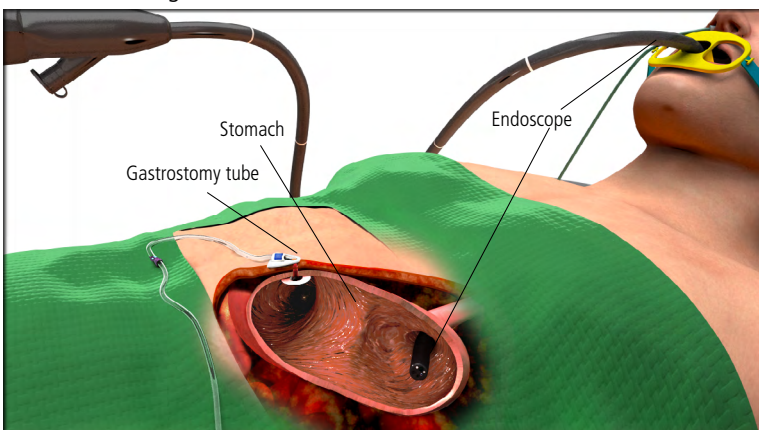
COURSE OF EXAMINATION ABLAUF DES EINGRIFFS

The feeding tube will be inserted while the patient is lying on their back during the gastroscopy procedure using an endoscope. It is a flexible, narrow tube which is controlled by the physician and equipped with a light source and a tiny camera on the top. First, a venous cannula is placed on your forearm. A sedative and/or pain killer is administered through it. Additional oxygen may be supplied through a nasogastric tube, if necessary. In order to make the insertion of the endoscope easier, your pharynx will be sprayed with a local anaesthetic. An anaesthetic (e.g. Propofol or Dormicum®) is usually injected through the permanent venous cannula, which is the reason why you will be in a condition similar to sleep. Its effect lasts for several minutes. If necessary, injecting will be repeated. You will have a mouth guard for teeth protection. It is also used to prevent you from biting on the endoscopic tube. For your own safety, fixation, e.g. of your hands for a short period may be necessary in order to prevent involuntary touching of the sterile surgical field.

In order to place the feeding tube, the endoscope is inserted through the mouth and then through the esophagus into the stomach. A tiny camera shall continuously transmit images to the monitor, so that the physician can control the insertion visually. The stomach can be expanded extensively by insufflation of air. At the area where the light of the endoscope can be well observed a small incision will be made through the abdominal wall, after disinfection and application of local anaesthesia. First, through this incision, a tubule is inserted through the abdominal wall into the stomach. Then a thread is inserted through this tubule and small endoscopic pliers grip it in the stomach. After that, the thread is removed through the mouth by means of endoscope. Now the feeding tube can be fixed to the end of the thread which is protruding from the mouth. By pulling the end of the thread which is protruding from the abdominal wall, the outer part of the feeding tube is taken out through the mouth, esophagus and stomach. The feeding tube is equipped with a support plate that prevents it from being completely pulled through the abdominal

wall opening and secures the tube to the abdominal wall. The second support plate is placed from outer side, whereby the injection channel in the abdominal wall and the stomach will connect around the tube and create a firm junction between inner and outer side. In order to prevent the inner support from attaching to the abdominal wall, it will be loosened slightly after about 12-24 hours.

There is also a possibility to insert the feeding tube directly through the abdominal wall. These tubes are equipped with a balloon which will be filled after the insertion, thereby preventing pulling out of the tube. This method is used, for example, when it is not possible to pass the tube through the esophagus.



In certain cases, e.g. in case of pyloric stenosis, it may be necessary to extend the tube up to the small intestine or the tube will be inserted from the outer side directly into the upper part of small intestine (PEJ tube).

Feeding tubes can be replaced, if necessary. For this purpose, there are, for example, special ones which have no external tube but only a small opening with a cover (G-button) and can be carried discreetly under clothes.

When the tube is no longer needed, it is generally removed by gastroscopy.

ALTERNATIVE PROCEDURE ALTERNATIV-VERFAHREN

Feeding tubes can be also inserted through the mouth, nose and pharynx into the stomach. However, these tubes are not suitable for long-term artificial feeding since they can cause inflammation and infection of the nose and pharynx. The tube can cause discomfort and pain areas can occur due to pressure exerted by the tube. If, in addition to the tube, nutrition is taken through the mouth, a risk of choking is present with this type of tube.

Artificial feeding with administration of infusions through the venous catheter, is also not suitable for long-term feeding, since it may cause inflammation and infection on the catheter. Furthermore, these liquid feeds must be prepared in a way that enables their administration directly into the blood.

Surgical insertion of the feeding tube is generally conducted only if gastroscopy is not possible.

If an alternative procedure is possible in your case, the physician will inform you about it.

PROSPECTS OF SUCCESSFUL TREATMENT

ERFOLGSAUSSICHTEN

Fluids, special food and industrial food intended for feeding tubes, as well as medicines can be administered through the feeding tube without any complications and in the necessary extent. Thus, sufficient nutrition will be provided with proper handling.

ADVICE FOR PREPARATION AND FOLLOW-UP CARE

HINWEISE ZUR VORBEREITUNG UND NACHSORGE

We kindly ask you to follow the instructions of the physician and medical staff responsible for providing care to patients. Unless otherwise provided, please pay attention to the following advice:

Preparation:

Your stomach must be empty **for insertion of the feeding tube**. Please, do not eat, drink or smoke at least 5 hours before the procedure. Small amounts of clear fluids, such as water, are permitted up to 2 hours before the procedure.

Medicine administration: It is important to inform your physician which medicines or injections you currently take (especially anti-clotting remedies, such as Aspirin® [ASS], Marcumar®, Heparin, Plavix®, Xarelto®, Predaxa® etc). The will inform you if and during which period you should discontinue the therapy.

Aftercare:

Initial pain at the insertion site for the tube can be successfully treated with medicines. Please inform your physician immediately if **temperature, severe abdominal pain, nausea**, or if **inflammation** occurs at the insertion site for the tube, since urgent treatment will be required in such cases.

If you have received a painkiller and/or a sedative in case you are an **outpatient**, it is necessary that an adult picks you up. Make sure that someone is staying with you at home during the period recommended by the physician. Since the ability to react is limited due to administration of pain killers and/or sedatives, you must not actively participate in road traffic (not even as a pedestrian) and perform risky activities **for 24 hours after the procedure**. Furthermore, during this period you should

not drink alcohol and should avoid making important personal or financial decisions.

When using certain sedatives, you might not remember the procedure or a short time span before it (retrograde amnesia).

Generally, you can start with artificial feeding on the day of tube insertion. It can be administered using syringes or special pumps. At the same time, it should be taken care that excessive amounts are not inserted into the stomach, because this can lead to **vomiting**. If vomited contents are inhaled, life-threatening **pneumonia** may occur.

At the beginning, changing of bandages should be done on a daily basis. The tube must be **washed** before and after each administration of food in order to avoid **clogging**.

During artificial feeding, even though food is not taken through the mouth, it is necessary to maintain good **oral hygiene** in order to prevent fungal infection or gum inflammation.

In order to prevent the inner support plate from growing into the gastric mucosa, the tube should be **moved** slightly 1-2 times a week.

After healing of the wound, which is about 2 weeks later, you **can take a shower or have a bath**.

POSSIBLE RISKS, COMPLICATIONS AND SIDE EFFECTS

RISIKEN, MÖGLICHE KOMPLIKATIONEN UND NEBENWIRKUNGEN

It is well known that any **medical treatment involves risks**. If complications occur, additional measures of treatment or an operation may be required and in an extreme case, - they can be **fatal** or lead to permanent damages. We kindly ask you to understand that due to legal reasons we have to mention all risks specific to this procedure, although partly they relate only to exceptions. The physician will explain to you in more detail the risks which are specific to you during the talk. However, you can also refuse detailed explanation. In that case, skip the chapter on risk and confirm that at the end of explanation.

Injuries of larynx, esophagus, stomach or duodenum due to use of the endoscope are rare. Also, **injuries** of other abdominal organs which are in front of the stomach due to puncture, e.g. of intestinal loop or liver cannot be excluded completely. In case of more severe injuries a surgery may be necessary and **life-threatening infections** may also occur.

Infections may occur at the injection site, e.g. of venous cannula. They are usually successfully treated with antibiotics. Rarely, germs can be spread into the blood and life threatening blood poisoning (sepsis) or inflammation of the inner lining of the heart (endocarditis) can occur.

In exceptional cases, the entering of stomach contents into the trachea may lead to **pneumonia**.

Damages to the teeth from the endoscope are very rare. In the case that one's teeth loosen, they may **fall out**.

Damages to skin, soft tissues or nerves (e.g. due to injection, disinfectants, application of electric operational instruments or despite the appropriate lying position) are rare. The consequences can be disturbance of sensation, numbness, partial paralysis and pain. They tend to be temporary. Damage of nerves or scars are rare.

Bleeding is usually immediately detected and stopped. Sometimes it may be necessary to expand the procedure and in case of severe loss of blood to transfer donor blood (**blood transfusion**). This may lead to infections with pathogens, such as, very rarely hepatitis viruses (the cause of dangerous inflammation of the liver), extremely rarely HIV (AIDS), BSE (Creutzfeldt-Jakob), or other dangerous - and sometimes unknown - germs.

Allergic reactions (reactions of intolerance), for example to medicines (painkillers, sedatives) are rare. The consequences can be skin rashes, itching, swelling, as well as nausea and cough. Severe reactions, such as breathing difficulties, spasms, tachycardia or vascular shock are rare. Due to decreased circulatory function and despite urgent medical intervention, it may lead to temporary or permanent damages of organs, such as brain damage, paralysis or kidney failure.

Administration of anaesthetics and sedatives may cause **breathing disorders or the reaction of cardiovascular system** (e.g. drop in blood pressure, slow heart rate) with **nausea and vomiting**. This is usually resolved by supplying oxygen or medicines. In case of **respiratory arrest**, mechanical ventilation is necessary in order to prevent brain damage. In extreme cases, despite immediate treatment, damage to organs (kidney or brain damage) can occur.

Through the permeable point on the opening for the insertion of the tube into the stomach or in case the tube has been moved from its proper position, the contents from the stomach can pass into the abdominal cavity and cause dangerous **inflammation of the peritoneum**.

The feeding tube can **break, become clogged** or impassable due to growing into the gastric mucosa. In such cases, it is often necessary to replace the tube.

At the point where the tube exists from the abdominal wall, **skin irritation, open wound or infection** may occur. In an extreme case removal of the tube may be necessary.

Nutrition through the tube can cause diarrhea.

In patients suffering from dementia, nutrition through the tube can lead to a state of anxiety, in these cases it may be necessary to fixate the tube.

Important Questions for Outpatient Procedures

Wichtige Fragen für ambulante Eingriffe

Who will pick you up when you are discharged from the hospital/ clinic/doctor'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 will you be able to be reached during the 24 hours after the procedure? Wo sind Sie in den nächsten 24 Stunden nach dem Eingriff erreichbar?

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

Telephone: [Telefonnummer]

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

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

Name: [Name]

Street, house number: [Straße, Hausnummer]

postcode, place: [PLZ, Ort]

Telephone: [Telefonnummer]

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 of treatment 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.

yes=ja no=nein

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), Heparin, Marcumar®,
 Plavix®, Ticlopidin, Clopidogrel, Xarelto®, Pradaxa®.

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

Any other: Sonstiges: _____
Sonstiges:

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

Do you take any other medications? yes no

Nehmen Sie andere Medikamente ein?

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 **gastrointestinal tract?** yes no

Wurden Sie schon einmal am **Magen-Darm-Trakt** operiert oder geröntgt?

Have you ever had a stomach endoscopy or a colonoscopy? yes no

Wurde bei Ihnen schon einmal eine **Magen- oder Darmspiegelung** durchgeführt?

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)?

Are you pregnant? not certain *nicht sicher* yes no

Besteht eine Schwangerschaft?

Do you have or have you ever had any of the following diseases or symptoms thereof:

Liegen oder lagen nachstehende Erkrankungen oder Anzeichen dieser Erkrankungen vor:

Blood diseases / blood clotting disorders? yes no

increased tendency to bleed (e.g. frequent nose-bleeds, increased bleeding after surgery, minor wounds or dental treatment), 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), 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).

Other: _____
Sonstiges:

Kidney diseases? yes no

Kidney insufficiency.

Nierenerkrankungen? Nierenfunktionsstörung (Niereninsuffizienz).

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.

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

Any other: _____
Sonstiges:

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

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

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

Any other: _____
Sonstiges:

Metabolic diseases? yes no

Diabetes (sugar sickness).

Stoffwechsel-Erkrankungen? Diabetes (Zuckerkrankheit).

Any other: _____
Sonstiges:

Communicable (contagious) diseases? yes no

Hepatitis, tuberculosis, HIV.

Infektionskrankheiten? Hepatitis, Tuberkulose, HIV.

Any other: _____
Sonstiges:

Damages to teeth / dental prostheses? yes no

Cavities, paradontosis, loose teeth, crown, bridge, implant, pivot tooth, removable artificial teeth.

Zahnschäden/Zahnersatz? Karies, Parodontose, lockere Zähne, Krone, Brücke, Implantat, Stiftzahn, herausnehmbarer Zahnersatz.

Any other: _____
Sonstiges:

Any other acute or chronic diseases / illnesses? yes no

Nicht aufgeführte akute oder chronische Erkrankungen?

Please describe: _____
Bitte kurz beschreiben:

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

