

# SAMPLING OF LIVER TISSUE (LIVER BIOPSY) PROBEENTNAHME AUS DER LEBER (LEBERBIOPSIE)

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

The clinic/doctor's surgery Klinik / Praxis:



Data about the patient: Patientendaten:

englisch

- with ultrasound check (unter Ultraschall-Kontrolle)  
 with CT check (unter CT-Kontrolle)

On (date): (Datum):

## Dear patient,

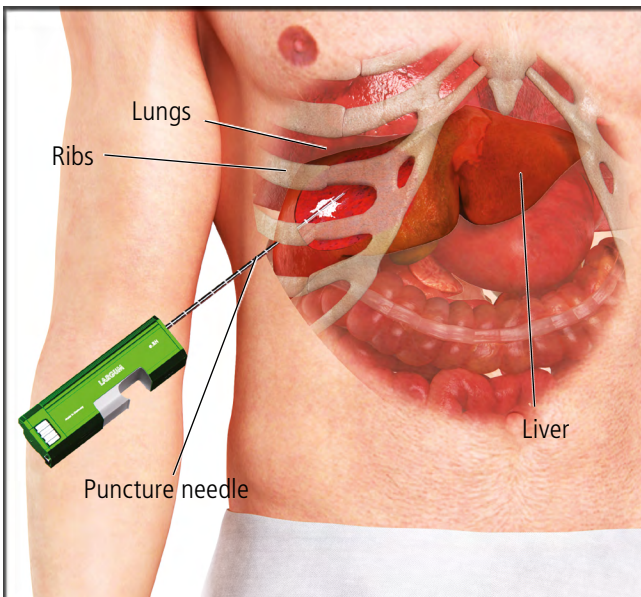
For the purpose of a more detailed clarification or check up of your liver disease, sampling of liver tissue by means of puncture (liver biopsy) is planned in your case.

This information should help you prepare for a talk with the physician. During the talk, the physician will explain to you advantages and disadvantages of the planned measure in comparison to alternative methods, as well as risks. He will answer your questions in order to reduce your fears and concerns. Then you can give or refuse consent to the proposed treatment. The physician will give you a copy of the completed and signed form after the talk.

### PUNCTURE PROCEDURE ABLAUF DER PUNKTION

The puncture is typically performed under local anaesthesia. Since the sampling might be painful, you will get additional sedatives and / or pain killers, if necessary. If narcosis is necessary, the anaesthesiologist will inform you separately about that.

The puncture is usually performed under the control of an imaging procedure (e.g. ultrasound). After disinfection and the administering of the anaesthetics at the puncture site, a hollow needle is inserted on the right side of the chest, between the ribs and down to liver. In order to conduct this procedure, you will be asked to hold your breath. Using the needle, one or more samples might be taken, even from different sites, if necessary (biopsy).



### ALTERNATIVE PROCEDURE ALTERNATIV-VERFAHREN

Liver diseases can often be detected through the haemogram or imaging procedures, such as magnetic resonance tomography, computed tomography or ultrasound. In certain cases it is ne-

cessary to take tissue samples and do microscopic examination, in order to make an exact diagnosis. At the same time, puncture is the mildest option for liver sample taking.

In certain cases, the liver sample can be taken during the procedure using a catheter (the so-called transjugular biopsy), by means of laparoscopy (the examination of the interior of the abdominal cavity), or by surgery.

### PROSPECTS OF SUCCESSFUL TREATMENT

#### ERFOLGSAUSSICHTEN

It is usually possible to make a precise diagnosis after the sampling of liver tissue. If a abnormal change in the liver is punctured, it can sometimes happen that the suspicious tissue has not been included in the sample, therefore pathological finding can be overlooked.

In rare cases (e.g. accretions) it is not possible to take a tissue sample by mean of puncture. Then the biopsy will be repeated at another site or some other test procedure will be used.

### ADVICE FOR PREPARATION AND AFTER CARE

#### HINWEISE ZUR VORBEREITUNG UND NACHSORGE

Please, follow the instructions of the physician and medical staff responsible for the care of patients.

#### Preparation:

**Intake of medicines:** It is important to inform your physician which medicines or injections you are currently taking (especially anti-clotting drugs, such as Aspirin® (ASS), Marcumar®, Heparin, Plavix®, Ticlopidin, Clopidogrel, Eliquis®, Lixiana®, Xarelto®, Predaxa® and antidiabetics containing metformin, the so-called „Biguanides“ for diabetic patients) or whether you have taken them irregularly in the last 8 days prior to the procedure (e.g. pain killers, such as Ibuprofen, Paracetamol). This includes any medicines without prescription and herbal remedies. The physician will inform you if, and for how long, you should discontinue taking them.

Your **stomach** must be **empty** for the puncture. Please do not eat or drink at least 5 hours before the surgery and refrain from smoking. Small quantities of clear fluids (e.g. glass of water) are allowed up to 2 hours before the puncture.

#### Aftercare:

After the surgery, remain in a lying position, as instructed. Ultrasonic check-up or image giving procedure using computer tomography may be necessary after several hours, in order to make sure that there is no liver haemorrhage.

The doctor will inform when you are allowed to **eat and drink** again.

**Minimal pain, a feeling of pressure** in the region of the puncture or **a pulling ache in the right shoulder** in the first days after the procedure are completely normal and can successfully be treated with medicines.

If you have received a painkiller and/or a sedative in case of an outpatient **cannulation/puncture**, it is necessary for an adult to pick you up. Make sure that someone is staying with you at home during the period recommended by the doctor. Since the speed of reaction is limited due to administering of pain killers and/or sedatives, you must not actively participate in road traffic (not even as a pedestrian) nor perform risky activities **for 24 hours after the procedure**. Furthermore, during this period you should not drink any alcohol and should avoid making important personal or financial decisions.

Please immediately inform your doctor or seek advice at the hospital if **abdominal pain, high temperature, nausea, vomiting, dizziness, black stool** or other disorders occur after the puncture. These discomforts may require urgent treatment. The discomforts might occur within a few days of the procedure.

#### POSSIBLE RISKS, COMPLICATIONS AND SIDE EFFECTS RISIKEN, MÖGLICHE KOMPLIKATIONEN UND NEBENWIRKUNGEN

It is well known that every **medical treatment involves some risks**. If complications occur, additional measures of treatment or surgery may be required and in extreme cases, - they can be **life-threatening** 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, even though they occur only on rare occasions. The doctor 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.

**Bruises** (hematoma) at the puncture site or around the puncture site occur occasionally. Thus hard, painful swellings may be

### 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: [PLZ, Ort, Straße, Hausnummer]

Telephone: [Telefonnummer]

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

present and they usually disappear without any treatment after a few days or weeks.

**Bleeding** in the abdominal cavity or the bile duct system may require receiving donor blood (**blood transfusion**). This might lead to infections due to germs, such as, very rarely hepatitis viruses (the cause of dangerous inflammation of the liver), extremely rarely HIV (AIDS), BSE (Creutzfeldt-Jakob), or other dangerous - sometimes unknown - pathogens. In case of heavier bleeding, catheters or surgery may be necessary.

**Infections** at the puncture site, with an abscess caused by injection or extinction of tissue (necrosis) are rare. In case of leakage of the bile fluid into the abdominal region, **inflammation of the peritoneum** may occur. Infections are usually successfully treated with antibiotics.

In extreme and exceptional cases germs can be spread into the blood and **life-threatening blood poisoning** (sepsis) or inflammation of the inner lining of the heart (endocarditis) may occur.

**Injuries of the pleura / rib cartilage** may occur during the puncture which could lead to air or blood getting into the chest cavity and lungs (pneumothorax). Insertion of a drainage may be necessary in order to improve breathing.

**Injury of adjacent organs** (e.g. lung, gallbladder, intestines, kidney) may require surgery and can lead to dangerous infections.

**Nerve damages** due to the puncture are rare. The consequences can be a feeling of numbness, partial paralysis and pain which are usually temporary. It rarely happens that discomforts do not subside despite treatment.

**Allergic reactions** to, e.g. medicines or latex can lead to skin rashes, itching, swelling, nausea and cough. Severe reactions, such as breathing difficulty, spasms, tachycardia, or **life-threatening vascular shock** are rare. Permanent damages of organs, such as brain damage, paralysis or kidney failure which will require dialysis treatment might occur.

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

During the puncture of malignant tumors, spread of tumor cells may happen, which can cause **metastasis** in extreme cases.



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]

## 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: \_\_\_\_\_

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?

**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).

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.

**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.

Any other: \_\_\_\_\_  
Sonstiges: \_\_\_\_\_

**Metabolic diseases?**  yes  no

Diabetes (sugar sickness).

**Stoffwechsel-Erkrankungen?**  Diabetes (Zuckerkrankheit).

Any other: \_\_\_\_\_  
Sonstiges: \_\_\_\_\_

**Thyroid diseases?**  yes  no

Underactive thyroid,  overactive thyroid.

**Schilddrüsenerkrankungen?**  Unterfunktion,  Überfunktion.

Any other: \_\_\_\_\_  
Sonstiges: \_\_\_\_\_

**Communicable (contagious) diseases?**  yes  no

Hepatitis,  tuberculosis,  HIV.

**Infektionskrankheiten?**  Hepatitis,  Tuberkulose,  HIV.

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.)

