

LUMBAR PUNCTURE (EXTRACTION OF CEREBROSPINAL FLUID) LUMBALPUNKTION (ENTNAHME VON NERVENWASSER)

Information and anamnesis for patients as a preparation for the required information talk with the surgeon

Hospital / Clinic / Practice: [Klinik / Praxis:]



Patient data: [Patientendaten:]

englisch

date: (Datum): _____

Dear patient,

An extraction of cerebrospinal fluid (liquor) out of your spinal cord canal is planned. The liquor will then be checked for inflammations or other pathological changes.

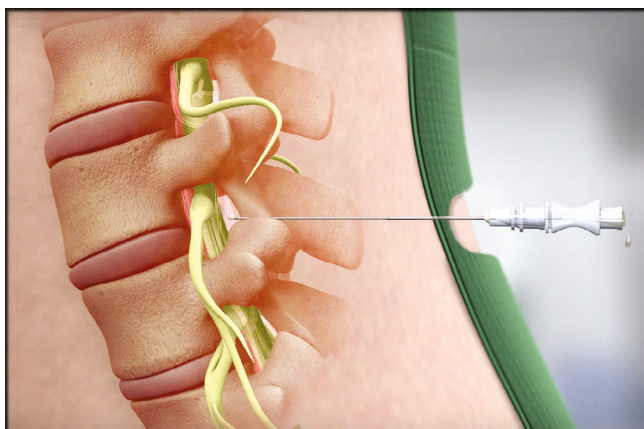
The following information is meant to prepare you for the information talk with your surgeon. During this talk your surgeon will explain to you all the advantages and disadvantages of the planned measures versus alternative methods and inform you about the risks. He will answer your questions to reduce fear and worries. Finally, you can give your consent to the recommended lumbar puncture. After the talk you will receive a copy of this completed and signed information sheet.

FUNCTION OF THE CEREBROSPINAL FLUID (LIQUOR) FUNKTION DES NERVENWASSERS (LIQUOR)

The central neural system (brain and spinal cord) is surrounded by a colourless liquid, the so-called cerebrospinal fluid (Liquor cerebrospinalis). In certain disorders of the central neural system, changes such as inflammations, infections, bleeding or other diseases can be detected in the liquor. An extraction and checking of the liquor can, therefore, give indication of disorders of the central neural system.

PROCEDURE OF CHECK-UP UNTERSUCHUNGSABLAUF

The lumbar puncture is carried out in either a sitting or lateral position. Your surgeon will ask you to arch your back. He will feel your back accurately and mark the lumbar puncture spot at about the height of your waist. This area will be thoroughly disinfected, covered sterilely and, if necessary, locally anesthetized. Since the liquor extraction will be done well below the spinal cord, there is hardly any risk of damaging the spinal cord.



During the puncture there might be a brief sensation of pain which will ease off as soon as the position of the needle is chan-

ged. It is important that you do not move during the puncture. Firstly, the surgeon will insert a cannula (hollow needle) into the vertebral canal and then extract some millilitre of liquor. In addition, depending on the issue, the liquor pressure can be measured via the puncture needle. In certain cases it is possible to directly administer medication into the spinal cord canal via the puncture spot. Your surgeon will inform you about this, should these measures be planned as to your case.

The puncture as such takes only a few minutes. After the extraction, the cannula will be removed and the puncture spot will be covered with a plaster.

ADVICE CONCERNING PREPARATION AND AFTER-CARE HINWEISE ZUR VORBEREITUNG UND NACHSORGE

Please, follow the surgeon's and assistant's advice strictly. The pieces of advice can vary depending on the kind of check-up.

Preparation:

Intake of medication / drugs: it is important to inform your surgeon about the medication you take on a regular basis or inject (especially anticoagulants such as Aspirin® [ASS], Marcumar®, Heparin, Plavix® etc.) as well as the drugs you took on an irregular basis in the 8 days before surgery. This includes all over-the-counter drugs and herbal medication. Your surgeon will inform you if and for how long you should discontinue the intake of these drugs.

Aftercare:

Due to the loss of liquor after the check-up some headache might come up. That's why you should drink a lot after the lumbar puncture. In case of really bad headaches medication can be given.

After the lumbar puncture you should rest in bed for some time. Your surgeon will give you detailed information.

Please inform your surgeon immediately should you suffer from complications such as a rash, breathlessness, cold sweat, tempe-

ature, severe nausea, back- or headaches. Immediate treatment will then be necessary. These complications might arise even days after the check-up.

RISKS, POTENTIAL COMPLICATIONS AND SIDE EFFECTS

RISIKEN, MÖGLICHE KOMPLIKATIONEN UND NEBENWIRKUNGEN

It is generally known that any medical surgery entails some risks. The lumbar puncture, though, is a low-risk routine procedure. Your surgeon will inform you in detail about your individual risks during the talk. Nevertheless, you can renounce detailed information. In that case, you may skip the chapters on risks and confirm this at the end of the information talk.

The loss of liquor can cause bad **headaches**, especially when you are in an upright position. They often occur only some days after the puncture and normally disappear after some time by means of intensive fluid intake, medication or bedrest. In very rare cases they remain for years. Due to the low pressure of liquor there might be, apart from the headaches, some nausea, dizziness, light-shunning, stiffness of the neck or tinnitus (noises in the ear). In some cases, injection of your own blood into the peridural area might become necessary (blood-patch). In extreme cases, a **subdural haematoma (bruise)**, a fluid accumulation or an impairment of the cerebral nerves might occur. Permanent neurological deficits, such as **deficiency of visual and hearing** capacity are absolutely rare.

Bad **backaches, nausea and urge** to vomit might occur and can last for some days. They are easily treated by taking medication.

During the puncture there might be some **pain** at the puncture spot as well as some **paraesthesia** (odd sensation) due to some irritation of the nerve roots.

There might occur a **liquor fistula** which, depending on circumstances, will be closed off by a minor surgery.

Allergic reactions, such as an intolerance reaction to disinfectant, anaesthetics or other drugs, are rare. Rash, itching, swelling and also nausea and coughing may arise. These usually disappear without treatment. Serious reactions, such as breathlessness, cramps, rapid heartbeat or **life-threatening** circulatory shock are rare. Due to the reduced circulation, there might occur temporary or permanent damage to organs such as brain damage, paralysis and kidney failure.

Haematoma (bruises) at the puncture spot might appear. Hereby, some painful swelling can arise, which will ease off within days or weeks.

Infections, for example at the insertion spot of the needle or cannula resulting in abscess, dying of some tissue or scar formation and phlebitis are rare. These infections are detectable in swelling, flush, pain, overheating of the skin and high temperature. In most cases, such infections can be treated with antibiotics. In rare cases, a spreading into the blood vessels can lead to sepsis (blood poisoning) and possibly inflammation of the inner tissue of the heart. Intensive treatment will then be necessary. Should germs get into the cerebral canal an abscess in the spinal cord, meningitis or encephalitis might occur.

Damaging of nerves or of the spinal cord due to the puncture, haematoma or infections are extremely rare. There might be some temporary, rarely permanent, disturbances in the organs affected, e. g. the bladder, intestines, odd sensations in the face or impediments as to visual and hearing capacity. The consequences might be pain, hypersensitivity, numbness, movement disorder in the affected limbs up to paralysis (in extreme **cases paraplegia**).

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.

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.

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.)

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:

Diseases of the nervous system? yes no

Brain disease or brain injuries, paralysis (anywhere), epilepsy, Increased intracranial pressure (hydrocephalus).

Erkrankung des Nervensystems? Gehirnerkrankungen oder -verletzungen, Lähmungen, Krampfanfälle (Epilepsie), erhöhter Hirndruck (Hydrozephalus).

Other: _____

Sonstiges:

Communicable (contagious) diseases? yes no

Hepatitis, tuberculosis, HIV.

Infektionskrankheiten? Hepatitis, Tuberkulose, HIV.

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.)

Medical documentation of information talk

Ärztl. Dokumentation zum Aufklärungsgespräch

Will be completed by surgeon Wird vom Arzt ausgefüllt

Über folgende Themen (z. B. mögliche Komplikationen, die sich aus den spezifischen Risiken beim Patienten ergeben können, nähere Informationen zu den Alternativ-Methoden, mögliche Konsequenzen, wenn die Untersuchung verschoben oder abgelehnt wird) habe ich den Patienten im Gespräch näher aufgeklärt:

Capability of independent consent:

Fähigkeit der eigenständigen Einwilligung:

- The patient is capable of making a decision on the recommended lumbar puncture and of giving his consent for the procedure.

Der/Die Patient/in besitzt die Fähigkeit, eine eigenständige Entscheidung über die empfohlene Lumbalpunktion zu treffen und seine/ihre Einwilligung in das Verfahren zu erteilen.

- The patient is represented by a carer, resp. the child by the parents/guardian. This person is capable of making a decision in terms of the patient.

Die Patientin wird von einem Betreuer bzw. Vormund mit einer Betreuungsurkunde vertreten. Dieser ist in der Lage, eine Entscheidung im Sinne der Patientin zu treffen.

Place, date, time [Ort, Datum, Uhrzeit]

Signature of surgeon [Unterschrift der Ärztin / des Arztes]

Rejection of patient Ablehnung des/der Patientin

Mr/Mrs. _____ informed me in detail about the suggested lumbar puncture and the resulting negative effect due to my rejection. I understood the information relating to this and could discuss my insights in this information with the surgeon. I hereby declare that I reject the suggested lumbar puncture.

Frau/Herr Dr. _ hat mich umfassend über die vorgeschlagene Lumbalpunktion und über die sich aus meiner Ablehnung ergebenden Nachteile aufgeklärt. Ich habe die diesbezügliche Aufklärung verstanden und konnte meine Erkenntnisse über die mir erteilten Informationen mit dem Arzt diskutieren. Hiermit lehne ich die vorgeschlagene Lumbalpunktion ab.

Place, date, time [Ort, Datum, Uhrzeit]

Signature of patient/carer/parent/guardian/witness [Unterschrift Patientin / Patient / Eltern* / Betreuer / Vormund / ggf. des Zeugen]

Declaration and consent of patient Erklärung und Einwilligung des Patienten

Please, tick the applicable box and confirm with your signature: Bitte kreuzen Sie Ihre Erklärung im zutreffenden Kästchen an und bestätigen Sie diese anschließend mit Ihrer Unterschrift:

- I declare, hereby, that I have understood all parts of the information talk.** The information sheets (4 pages)

I have read. During the talk Mr/Ms. _____

informed me about the procedure of the planned lumbar puncture, the risks, complications and side effects and about the pros and cons of alternative methods.

Ich bestätige hiermit, dass ich alle Bestandteile der Patientenaufklärung verstanden habe. Diesen Aufklärungsbogen (4 Seiten) habe ich vollständig gelesen. Im Aufklärungsgespräch mit Frau/Herrn Dr. _ wurde ich über den Ablauf der geplanten Lumbalpunktion, deren Risiken, Komplikationen und Nebenwirkungen in meinem speziellen Fall und über die Vor- und Nachteile der Alternativmethoden umfassend informiert.

- I renounced deliberately detailed information.** I declare that, nevertheless, the surgeon in charge informed me about the necessity of the lumbar puncture, the kind and extend as well as possible risks of the treatment.

Ich verzichte bewusst auf eine ausführliche Aufklärung. Ich bestätige hiermit allerdings, dass ich von dem behandelnden Arzt über die Erforderlichkeit der Lumbalpunktion, deren Art und Umfang sowie über den Umstand, dass die Behandlung Risiken birgt, informiert wurde.

- I hereby assure that I have no further questions and do not need further time for consideration. I agree with the suggested lumbar puncture.** The questions as to my anamnesis I have answered in all conscience.

Ich versichere, dass ich keine weiteren Fragen habe und keine zusätzliche Bedenkzeit benötige. Ich stimme der vorgeschlagenen Lumbalpunktion zu. Die Fragen zu meiner Krankengeschichte (Anamnese) habe ich nach bestem Wissen vollständig beantwortet.

I assure that I am capable of following medical advice.

Ich versichere, dass ich in der Lage bin, die ärztlichen Verhaltenshinweise zu befolgen.

*If only one parent signs, then by so doing this parent declares that he/she has sole rights of custody or is acting with the consent of the other parent.

- I agree that my copy of this explanatory form may be sent to the following e-mail address: Ich bin damit einverstanden, dass meine Kopie dieses Aufklärungsbogens an folgende E-Mail-Adresse gesendet wird:

E-Mail-Adresse

Place, Date, Time [Ort, Datum, Uhrzeit]

Signature of patient/legal guardian(s)
[Unterschrift Patient/in/Eltern*/Betreuer/Vormund]

Copy/kopie: received/erhalten
 waived/verzichtet

Signature of patient/legal guardian(s)
[Unterschrift Patient/in/Eltern/Betreuer/Vormund]