

CARPAL TUNNEL SYNDROME OPERATION

KARPALTUNNELSYNDROM-OPERATION

Information and history for patients in preparation of the required explanatory appointment with the physician.

Klinik / Praxis:



Patientendaten:

englisch

Der Eingriff ist vorgesehen am (Datum):

- left hand
 right hand

Dear Patient,

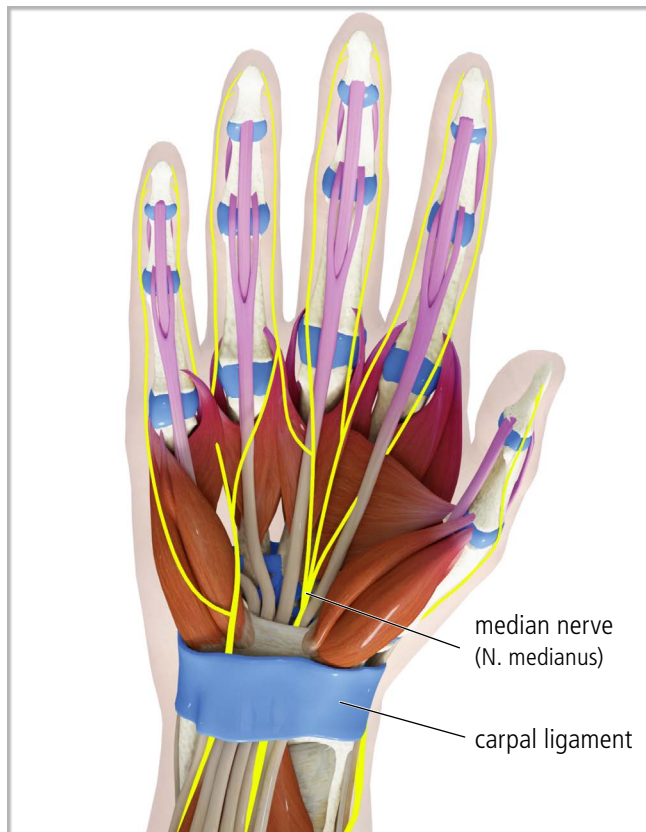
you have been diagnosed with a compression of the median nerve of your hand, a so called carpal tunnel syndrome (CTS), which is to be treated surgically by cutting the connective tissue (carpal ligament) which lies in the heel of your hand. This ought to lead to alleviation of complaints of yours such as abnormal or impaired sensations, numbness, pain and grip weakness in the affected fingers.

The following text is intended to prepare you for your pre-procedure interview with the doctor. During the interview, the doctor will explain to you the advantages and disadvantages of the scheduled operation compared with alternative methods available, and inform you of any risks specific to your case. 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 operation suggested to you. Your doctor will provide you with a copy of the completed and signed form after the interview.

COURSE OF THE VARIOUS PROCEDURES

ABLAUF DER VERSCHIEDENEN VERFAHREN

Inflammations, rheumatic changes, injuries, tissue swelling due to hormones and even tissue overgrowths can lead to compression of the carpal tunnel with pressure on the median nerve. This leads to irritation and inflammation of the nerve and eventually to nerve damage with loss of sensation in the fingers and loss of muscle in the ball of the thumb.



The operation aims to release the pressure on the median nerve, guard against nerve damage and give the nerve an opportunity to recover from any adverse affects that it has already sustained.

The operation is performed in a bloodless field. The hand and the entire arm are thoroughly disinfected and wrapped in a special rubber band. A blood pressure cuff is attached and pumped up to block off the supply of blood. This reduces loss of blood and provides a better view of the operative site.

The operation is conducted under local or regional anaesthesia or possibly general anaesthesia. This will be explained to you separately. The operative procedure to be applied in your case will be selected on the basis of a number of factors. Basically, there are two procedures:

Open Operation Offene Operation

With the open operation, first an incision is made in the ball of the hand. The surgeon dissects the carpal ligament so that it is free and cuts it along its length. Then he loosens any adhesions and removes any connective tissue that is exerting pressure on the median nerve.

Endoscopic Operation Endoskopische Operation

With the endoscopic operation, also known as minimally invasive or keyhole surgery, the surgeon makes a small incision in the wrist and possibly another small incision in the palm. To make sufficient space for the endoscope, he pushes dilators in order of increasing size into the carpal tunnel toward the base of the fourth finger. He inserts the endoscope into the dilated tunnel, evaluates the structures in the operative field and cuts the carpal ligament with a small special knife.

When he is finished, the surgeon inserts a drain to direct wound drainage to the outside, sews up the incision and applies a pressure dressing to the hand. The hand will be kept still with a splint as appropriate.

Depending on how the operation proceeded, the dressing can be removed on the day of the operation or after a few days, and then physical therapy can begin.

POSSIBLE SUPPLEMENTARY MEASURES MÖGLICHE ERWEITERUNGSMASSNAHMEN

In the case of an open operation, if there is no other alternative and the risk of a second operation is too great, the surgeon will carry out any necessary, additional measures, such as, for example, an annular pulley release or removal of inflamed tendon sheaths or connective tissue outgrowths. With the endoscopic operation it can become necessary to switch to the open operation, possibly because of distinctive anatomic features, for example. If the possibility of a supplementary measure is predictable, your physician will inform you of this in advance.

ALTERNATIVE PROCEDURES ALTERNATIV-VERFAHREN

In the initial stage of CTS, the complaints can be alleviated by means of wrist splints, cuffs, suspensory bandages, and injection or intake of anti-inflammatory medications. In many cases, the success of such treatments is not permanent and sometimes the symptoms get worse. In the advanced stage of CTS, the median nerve can only be released from pressure by means of an operation.

The question of whether an endoscopic or open operation is preferable depends, among other things, on the scope of the operation to be performed. Your physician will be glad to explain to you which procedure is suitable for you.

PROSPECTS OF SUCCESS ERFOLGSAUSSICHTEN

The success of this treatment depends significantly on the severity and duration of the disease and the extent to which the median nerve has been damaged.

If the operation is performed in time, the nerve can probably recover completely. However, regeneration of the nerve can take as long as half a year.

Sometimes the surgeon does not succeed in completely cutting through the carpal ligament. Then the complaints frequently persist and another, probably open operation can be necessary.

Over the long term the median nerve might become compressed again, for example by adhesions or recent scar tissue that must be removed in another operation.

PREPARATION AND POST-OPERATIVE CARE HINWEISE ZUR VORBEREITUNG UND NACHSORGE

Please strictly follow the instructions of the physician and of the nursing personnel. Insofar as they have not ordered anything else, the following instructions apply.

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®, Ticlopidin, Clopidogrel, Eliquis®, Lixiana®, Xarelto®, Pradaxa® etc. or metformin-containing antidiabetic medicines (biguanides)) or have taken irregularly over the course of the past eight days prior to the procedure (for instance pain killers such as Ibuprofen, Paracetamol). This includes any over-the-counter medication and herbal remedies. Your doctor will let you know if and for how long you need to stop taking your medication.

Post-Operative Care:

During the first days, the incision might cause pain that can be alleviated well with medications. Recovery of the nerve might initially be accompanied by abnormal or impaired sensations.

Please be sure to keep the hand in an elevated position during the first few days, for example by laying it on a cushion, preferably higher than the heart.

You will be shown some physical therapy exercises within a few days of the operation, possibly even on the day of the operation. Please perform them conscientiously.

Please be sure to inform your physician immediately if any complaints occur, such as, for example, pain, swelling, fever or abnormal or impaired sensations if there are feelings of numbness, or if any fingers turn blue or pale, this might be an indication that the dressing is too tight, in which case the dressing must be removed immediately to prevent nerves from being damaged.

With respect to other behaviour such as taking medications and favouring your hand, be sure to follow the orders of your physician.

In the case of **outpatient surgery**, you must be picked up by an adult. You should also arrange for an adult to be with you at home to watch over you for the period of time recommended by your doctor. Since your abilities to react can be limited through the administration of medications, you may not actively participate in road traffic, not even on foot as a pedestrian, for the first **24 hours after the operation** and refrain from any risky activities and avoid taking any important decisions.

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

It is well known that **any medical procedure 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.

Infections in most cases can be treated well with antibiotics. An **infection of a bone or joint** can lead to reduced mobility and necessitate operative treatment. In rare cases, the infection can lead to a **stiff joint**. An infection that has spread beyond control can even lead to loss of fingers or the entire hand or in extreme and rare cases to dangerous **blood poisoning** (toxaemia).

Bruises (haematomas) and **post-operative bleeding** occur occasionally. They can cause formation of hard, painful swelling. Most of them disappear by themselves without treatment after a few days or weeks.

With delayed wound healing or in patients with a predisposition to **impaired wound healing** there can be painful formation of scars and overgrowths (keloids), especially with the open operation. A corrective operation can be necessary if there is development of scars that impact the hand's ability to move.

Allergic reactions, for instance to medication or latex, can lead to skin rash, itching, swelling, nausea and coughing. Severe reactions such as shortness of breath, spasms, tachycardia or **life-threatening circulatory shock** are rare. They may then result in permanent organ damage, such as brain damage, paralysis or kidney failure requiring dialysis.

In rare cases, **nerves** or **major blood vessels** can be **injured**. Injuries to blood vessels can lead to impaired circulation and necroses (death) of soft tissue. If a major blood vessel is injured, it might be necessary to perform another operation, either immediately or later on, to stop the bleeding and restore the blood vessel. If a nerve is injured, a nerve suture might be required.

Permanent sensory disorders, pain and weakness or **paralyses** in the fingers, thumb and wrist can occur even when treatment starts at once. Small skin nerves that are cut through during the operation can lead to temporary, or, in rare cases, even to **permanent numbness** in the area of the operation scar.

The procedure can precipitate a **complex regional pain syndrome** (formerly called reflex sympathetic dystrophy) with circulation problems, swelling of soft tissue, changes to the skin and pain. This can eventually lead to atrophy of muscles and bones and to stiffening of joints. Treatment is symptomatic with physical therapy and medications.

Damage to the skin, soft tissue, or nerves (for example, due to injections, disinfectants, the use of electrosurgical instruments, the arrest of blood circulation or despite appropriate positioning) are possible. This can result in numbness, paralysis and pain. Most of these complaints are temporary. In some cases, permanent nerve damage, tissue death or scarring may occur.

In the case of operations on the upper extremities, formation of blood clots is extremely rare, but as with every operation, blood clots (**thromboses**) can form and cause a blood vessel to be blocked. Blood clots can also be carried along to block the blood vessels of other organs (**embolism**). This can lead to perma-

nent damage to the affected organ (e.g. lung embolism, stroke with permanent paralyses, kidney failure) despite treatment. If blood-thinning agents are administered as a precaution, the risk of bleeding or secondary bleeding will increase. If **Heparin is administered**, it may lead to a **severe immune response** (HIT) involving clotting of the platelets (thrombocytes) and obstruction of veins and of arteries.

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

Are there required blood thinning medications (anticoagulants) or have there been taken any or have any been injected during the past 8 days?

yes no
 Aspirin® (ASS), Heparin, Marcumar®,
 Plavix®, Ticlopidin, Clopidogrel, Xarelto®,
 Pradaxa®.

Werden regelmäßig blutgerinnungshemmende Mittel benötigt oder wurden in der letzten Zeit (bis vor 8 Tagen) solche eingenommen/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:

Have you ever had an operation on your hand? yes no

Wurden Sie schon einmal an der Hand operiert?

Are you pregnant? not certain yes no

Sind Sie schwanger?

nicht sicher

Are you currently breast feeding a baby? yes no

Stillen Sie?

Do you smoke? yes no

If so, what and how much daily: _____
 Rauchen Sie? Wenn ja, was und wie viel täglich:

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 tendency to bleed (e.g. frequent nosebleeds, increased bleeding after surgery, minor wounds or dental 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?

Blood clot (thrombosis), blood vessel occlusion (embolism)? yes no

Blutgerinnsel (Thrombose)/Gefäßverschluss (Embolie)?

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:

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

asthma, chronic bronchitis, inflammation of the lungs, emphysema, sleep apnoea (intense

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

snoring with breathing interruptions), vocal cord/diaphragm paralysis.

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

Any other:

Sonstiges:

Metabolic diseases?

yes no

diabetes (sugar sickness), gout.

Stoffwechsel-Erkrankungen? Diabetes (Zuckerkrankheit), Gicht.

Any other:

Sonstiges:

Thyroid diseases?

yes no

underactive thyroid, overactive thyroid.

Schilddrüsenerkrankungen? Unterfunktion, Überfunktion.

Any other:

Sonstiges:

Kidney diseases?

yes no

kidney insufficiency, kidney inflammation.

Nierenerkrankungen? Nierenfunktionsstörung (Niereninsuffizienz), Nierenentzündung.

Any other:

Sonstiges:

Communicable (contagious) diseases?

yes no

hepatitis, tuberculosis, HIV.

Infektionskrankheiten? Hepatitis, Tuberkulose, HIV.

Any other:

Sonstiges:

Predisposition to impaired wound healing, abscesses, fistulas, excessive scar formation (keloids)?

yes no

Neigung zu Wundheilungsstörungen, Abszessen, Fisteln, starker Narben-Bildung (Keloide)?

Any other acute or chronic diseases / illnesses?

yes no

Nicht aufgeführte akute oder chronische Erkrankungen?

Please describe: Bitte kurz beschreiben: _____

Important Questions for Outpatient Procedures

Wichtige Fragen für ambulante Eingriffe

Who will pick you up when you are discharged?

Wer wird Sie abholen, sobald Sie 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: [Straße, Hausnummer] postcode, place: [PLZ, Ort]

Telephone: [Telefonnummer]

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



Medical Documentation of Explanatory Appointment

Ärztl. Dokumentation zum Aufklärungsgespräch

To be filled in by the physician 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 der Eingriff verschoben oder abgelehnt wird) habe ich den Patienten im Gespräch näher aufgeklärt:

Blank lines for medical documentation.

Planned is: Geplant ist:

- Carpal ligament cut – open operation
Carpal ligament cut – endoscopic

Patient’s ability to take an independent decision on giving consent: Fähigkeit der eigenständigen Einwilligung:

- The patient is capable of making an independent decision regarding the recommended procedure...
The patient is represented by a custodian with a custodian’s card which states that he/she is also responsible for the patient’s healthcare, or by a trusted person with a healthcare proxy...

copy for Patient: yes no

Kopie für Patient: yes no

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

Physician’s signature [Unterschrift der Ärztin / des Arztes]

Patient’s Refusal Ablehnung

The doctor _____ has given me a full explanation of the operation recommended for me and of the disadvantages that will result from my refusal. I have understood this explanation and I hereby refuse the operation that has been recommended for me.

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

Refusal of the patient / legal guardians / witness, if any [Ablehnung Patient / Patientin / Betreuer / Vormund / ggf. des Zeugen]

DECLARATION OF CONSENT

Einwilligungserklärung

Please tick the appropriate boxes and confirm your statement with your signature below:

Bitte kreuzen Sie die zutreffenden Kästchen an und bestätigen Sie Ihre Erklärung anschließend mit Ihrer Unterschrift:

- I hereby confirm that I have understood all the parts of this explanation for patients. I have read this explanatory document (5 pages) in its entirety.
I have seen and understood the film about the operation that has been scheduled for me.
I hereby deliberately waive my rights to more detailed explanations. However, I hereby confirm that the doctor _____ instructed me regarding the necessity of the operation, its type and scope as well as the fact that the operation is accompanied by certain risks.

I affirm that I have no further questions and do not need any more time in which to think the matter over. I consent to the recommended operation. I answered the questions about my medical history to the best of my knowledge. I also consent to all required auxiliary and follow-up measures (e.g. removal of connective tissue outgrowths or tendon adhesions).

Ich versichere, dass ich keine weiteren Fragen habe und keine zusätzliche Bedenkzeit benötige. Ich stimme der vorgeschlagenen Operation zu. Die Fragen zu meiner Krankengeschichte (Anamnese) habe ich nach bestem Wissen vollständig beantwortet. Ich willige ebenfalls in alle notwendigen Neben- und Folgemaßnahmen (z.B. Entfernung von Bindegeweswucherungen, Sehnenverklebungen) ein.

I affirm that I am in a position to follow the medical instructions I have received in regard to what is expected of me. Ich versichere, dass ich in der Lage bin, die ärztlichen Verhaltenshinweise zu befolgen.

If treatment is subject to an elective service agreement (referred to as treatment by senior consultant), the patient’s consent also applies to the procedures being carried out by the senior consultant’s permanent representatives as specified in the elective service agreement.

- 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 address [E-Mail-Adresse]

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

Signature of the patient / legal guardian(s) [Unterschrift Patientin / Patient / Betreuer]

