

TENDON SHEATH STENOSIS OPERATION

SEHNENSCHIEDENENGE-OPERATION

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

Clinic / Practice: [Klinik / Praxis]

zoom

**zentrum für
orthopädisch/
unfallchirurgische
medizin**

Patient data: [Patientendaten]

englisch

The operation is scheduled for (date): [Der Eingriff ist vorgesehen am (Datum)]

left hand **affected finger**
linke Hand betroffene(r) Finger _____

right hand **affected finger**
rechts Hand betroffene(r) Finger _____

Dear Patient,

You have been diagnosed with a narrowing of the tendon sheath of one or more fingers that leads to pain and restricts the movement of your hand. It is to be treated by an operation for restoring the ability of these fingers to move properly.

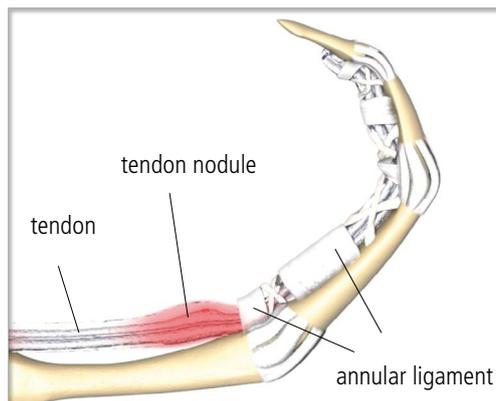
By providing the explanations below, we wish to inform you and your family of how the operation proceeds, the possible complications, and what you should do before and after the operation. You might be shown a short film. This form and the film are designed to prepare you for the explanatory appointment with your physician. He or she will describe the advantages and disadvantages of the procedure selected for you relative to those of alternative methods and explain and clarify the risks that apply to your case and the complications that can ensue. Please read the following explanations and fill in the questionnaire with care. Of course, the information you provide will be treated as strictly confidential.

Your physician will also answer all of your questions to help relieve you of worry and fear. At the end of your explanatory appointment you can give or refuse your consent to performance of the operation recommended for you. Your physician will give you a copy of the completed, signed form at the end of your explanatory appointment.

CAUSES OF TENDON SHEATH STRICTURES

URSACHEN VON SEHNENSCHIEDENVERENGUNGEN

Healthy finger tendons slide in the tendon sheaths and the flexor tendons are guided by the annular ligaments. A number of factors such as chronic overload of the hand, diseases such as rheumatism, gout and diabetes, inflammations or even undue force first lead to a tendon sheath inflammation. The tendon sheath becomes narrow and it becomes harder for the tendon to slide. This can affect both flexor (bending)



tensors and extensor (stretching) tendons. As a result, the tendon thickens and the finger experiences pain and is limited in its movements. Tendon nodules develop frequently, especially on flexor tendons. At the last stage of the disease these nodules completely block the sliding action of the flexor tendons, usually at the first annular ligament (see figure). Then, in many cases, the finger can be stretched only with the assistance of the other hand. Sudden snapping frequently causes pain. This phenomenon is called "trigger finger" (tendovaginitis stenosans). Later, pain occurs even when the finger is at rest or under pressure. The operation aims to make it possible for the tendons to slide freely again.

COURSE OF THE OPERATION

ABLAUF DER OPERATION

The operation is generally performed under local anaesthesia. Sometimes it is performed under regional anaesthesia (brachial plexus block) or even general anaesthesia. This will be explained to you separately. During the operation, your organ functions will be monitored without interruption and if there are any problems, remedial action will be taken immediately.

First the hand and entire arm are thoroughly disinfected and wrapped in a special rubber band in order to produce a bloodless field in the area of the operation. This reduces loss of blood and provides a better view of the operative site. A blood pressure cuff around the upper arm is pumped up to block off the supply of blood during the entire operation.

The surgeon makes a small incision and exposes the bundle of blood vessels and nerves that runs along the tendon and pushes it aside. He opens the tendon sheath (in the case of an extensor tendon also called the tendon compartment) and removes any inflamed tissue that is present. In the case of a flexor tendon, he usually also divides the first annular ligament. Then he checks that the tendon is able to move smoothly. He might ask you to move and stretch the finger. When the operation is over, 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 fingers should be moved on the day of the operation as a precaution against agglutinations and adhesions. Special physical therapy is generally not required.

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POSSIBLE SUPPLEMENTARY MEASURES

MÖGLICHE ZUSATZMASSNAHMEN

During the operation it can turn out that there are additional pathologic changes such as cysts, synovial membrane overgrowths, tendon agglutinations, etc. These should be removed too in the same operation so that a second operation does not become required. If your physician anticipates that such supplementary measures will be advisable, he will inform you of this in advance.

ALTERNATIVE PROCEDURES

ALTERNATIV-VERFAHREN

In the initial stage, injecting anti-inflammatory medications can cause the swelling and inflammation to recede. If there is not yet any permanent damage to tendons or tendon sheaths, such injections can bring about temporary or even lasting relief.

Alternatively, the annular ligament can be severed just by piercing it with an injection needle, without an operation. However, these alternative methods have their own disadvantages and risks, which your physician will be glad to explain to you if you would like.

However, given the state of your disease, your physician has recommended the operation because this promises the best result.

PROSPECTS OF SUCCESS

ERFOLGSAUSSICHTEN

In most cases the operation will take away the pain and restore normal movement of the finger. But sometimes the middle joint continues to be stiff.

However, pain from the scar can be uncomfortable and last for several weeks. In extreme cases it can take an entire year for the inflammation to go away completely.

PREPARATION AND POST-OPERATIVE CARE

HINWEISE ZUR VORBEREITUNG UND NACHSORGE

Please strictly follow the instructions of the physician and his or her assistants. Insofar as they have not ordered anything else, the following instructions apply.

Preparation:

Intake of Medications: It is important that you tell your physician which medications you take or are injected on a regular basis (especially anticoagulants such as Aspirin® [ASS], Marcumar®, heparin, Plavix®, etc.) and which other medications you have taken in the 8 days before the medical procedure (e.g. pain killers like ibuprofen, paracetamol). This includes all non-prescription medications and herbal preparations. You will then be told which medications, if any, must be discontinued and for how long.

Post-Operative Care:

During the first days, the incision might cause pain that can be alleviated well with medications.

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.

Starting on the day of the operation, you should repeatedly bend and stretch the fingers that have been operated on.

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

With respect to other behaviour such as taking medications, favouring your hand, and appointments for checkups, be sure

to follow the orders of your physician. Your hand is likely to take only 3 weeks to become fully functional again.

If the case of outpatient surgery, you will be monitored at the hospital or clinic until your bodily functions are stable and you can be discharged. Then 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 24 hours. Since your abilities to react can be limited after this operation, you may not actively participate in road traffic, not even on foot as a pedestrian, for the first 24 hours after the operation. During this time you must also refrain from doing anything that might be dangerous for you, especially anything that might allow you to lose your balance. During this recovery period, you should also refrain from taking decisions that are important for personal or financial reasons.

RISKS, COMPLICATIONS AND SIDE EFFECTS

RISIKEN, MÖGLICHE KOMPLIKATIONEN UND NEBENWIRKUNGEN

Every medical procedure has its risks. The frequency of possible side effects and complications depends on several factors such as age, general condition, other diseases and lifestyle. Here we list possible unforeseeable occurrences that might, under certain circumstances, require subsequent treatment or operations or even – possibly later on – become **life-threatening**. During your explanatory appointment, your physician will explain the risks that apply to you in greater detail. If you do not wish to receive these detailed explanations of risks and complications, please confirm this wish with your signature in the relevant section of the patient consent form at the end of this document. Even in this case, however, we must ask you to answer the questions about your medical history conscientiously.

Infections, for example in the area of the operating wound, or at the entry point of an injection needle, with necrosis (tissue death) and formation of scars, injection abscess or vein inflammation (phlebitis) are rare. An infected wound expresses itself in swelling, reddening, pain, excessive warmth in the skin and fever. In most cases infections can be treated well with antibiotics. An **infection of a bone or joint** can necessitate operative treatment. In rare cases, the infection can lead to a **stiff joint**. In extreme exceptional cases, an infection that cannot be brought under control can even lead to **loss of fingers** or the **hand**.

Bruises (haematomas) and **post-operative bleeding** occur occasionally and can cause formation of hard, painful swelling. While most of them disappear by themselves without treatment after a few days or weeks, they can also lead to impaired wound healing. In this case another operation can be necessary.

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

Allergic reactions, such as to medications (antibiotics, anaesthetic agents, pain killers, etc.), disinfectants or latex are rare. They can result in reddening of the skin, rashes, lumps in the skin, itching, and swelling as well as nausea and coughing. These symptoms usually go away on their own without treatment. Severe allergic reactions such as swelling of the laryngeal mucous membrane, disturbances of the cardiovascular system or of the functioning of the lungs are very rare. The resulting laboured breathing, cramps excessively rapid heartbeat or circulatory shock require intensive medical care. Temporary or even permanent damages to organs such as brain damage, impaired vision, impaired sensations, or even paralyses, impaired kidney function or kidney failure can occur despite the best of treatment.

In rare cases, **major blood vessels, tendons, muscles or nerves** can be **injured**. Injuries to blood vessels can lead to impaired circulation and 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 or repair the blood vessel. Injuries of tendons or muscles lead to motor disturbances of individual fingers after the operation. If a nerve is injured, a nerve suture might be required. Permanent **sensory disorders, pain** and weakness or **paralyses** in the fingers can occur despite immediate treatment. If these abnormal or impaired sensations are extreme, then, in exceptional cases, it might be necessary to **amputate the affected finger**.

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.

After the operation, the division of the first annular ligament can lead to **displacement of the tendon from its compartment**. This does not normally result in any limitation of function.

Sometimes the **tendons** are weakened by the disease to such an extent that they **can tear**. Then a stitch or plastic procedure is possible.

In very rare cases, the reduction in blood circulation during the operation might cause areas of skin along the incision to die off (**skin necrosis**).

After the operation there can be permanent **swelling** that is able to interfere with the hand's functional abilities.

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 (**embolism**). Blood clots can also be carried along to block the blood vessels of other organs. This can lead to permanent damage to the affected organ (e.g. lung embolism, stroke with permanent paralyses, kidney failure) despite treatment. The risk of early or late bleeding will increase. If heparin is given, the probability of a **serious impairment of blood clotting** (HIT) will rise. This means that the risk of thrombus formation and thus of vessel blockages will rise too.

Due to the operation, there can also be an occurrence of a **complex regional pain syndrome** (Morbus Sudeck) with circulatory disturbances, 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 tourniquet, or despite appropriate positioning) is rare. This can result in pain and scars, sensory disorders, numbness, and paralysis. Most of these complaints are temporary. In very rare cases such complaints can become permanent despite appropriate efforts to treat them.

Questions about Your Medical History

Please fill in the following questionnaire carefully before your explanatory appointment. **Please tick true!** The information you provide will help the physician to better assess the risks of anaesthesia in your particular case, to advise you of the complications that could result, 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®.

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 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 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 nosebleeds, 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?

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), drugs that depress consciousness, 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 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-Zwischfällähmung.

Other: _____
Sonstiges: _____

Metabolic diseases? yes no

diabetes (sugar sickness), gout.

Stoffwechsel-Erkrankungen? Diabetes (Zuckerkrankheit), Gicht.

Other: _____
Sonstiges: _____

Thyroid diseases? yes no

underactive thyroid, overactive thyroid.

Schilddrüsenerkrankungen? Unterfunktion, Überfunktion.

Other: _____
Sonstiges: _____

Kidney diseases? yes no

kidney insufficiency, kidney inflammation.

Nierenerkrankungen? Nierenfunktionsstörung (Niereninsuffizienz), Nierenentzündung.

Other: _____
Sonstiges: _____

Communicable (contagious) diseases? yes no

hepatitis, tuberculosis, HIV.

Infektionskrankheiten? Hepatitis, Tuberkulose, HIV.

Other: _____
Sonstiges: _____

Predisposition to impaired wound healing, abscesses, fistulas, excessive scar formation (keloids)? yes no

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

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 Lebensalter 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]

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]

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

postcode, place: [PLZ, Ort]

Telephone: [Telefonnummer]

Medical Documentation of Explanatory Appointment

Ärztl. Dokumentation zum Aufklärungsgespräch

To be filled in by the physician Wird vom Arzt ausgefüllt

During the explanatory appointment I explained the following subject matter to the patient in detail (e.g. possible complications that can result from the risks specific to the patient, details of the alternative methods and possible consequences if the operation is postponed or refused).

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:

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

The patient has the ability to make an independent decision on the operation that has been recommended and to give his or her consent to this operation.

Der Patient besitzt die Fähigkeit, eine eigenständige Entscheidung über das empfohlene Operations-Verfahren zu treffen und seine Einwilligung in die Operation zu erteilen.

The patient was represented by a custodian or other legal guardian with proof of authority. This person is in a position to make a decision in the interests of the patient.

Der Patient wird von einem Betreuer bzw. Vormund mit einer Betreuungsurkunde vertreten. Dieser ist in der Lage, eine Entscheidung im Sinne des Patienten zu treffen.

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

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

Patient's Refusal Ablehnung des Patienten

Dr. _____ 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. I was also able to discuss with this physician my knowledge and understanding of the information given to me. I hereby refuse the operation that has been recommended for me.

Frau/Herr Dr. _____ hat mich umfassend über den bevorstehenden Eingriff 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 mir vorgeschlagene Operation ab.

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

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

Patient's Declaration and Consent

Erklärung und Einwilligung des Patienten

Please mark your declaration in the applicable box and then confirm it with your signature.

Bitte kreuzen Sie Ihre Erklärung im zutreffenden Kästchen an und bestätigen Sie diese 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 and answered the questions about my medical history to the best of my knowledge. During my explanatory appointment, Dr. _____ has given me a comprehensive explanation of the operation scheduled for me, its risks, complications and side effects in my specific case, and the advantages and disadvantages of the alternative methods.

Ich bestätige hiermit, dass ich alle Bestandteile der Patientenaufklärung verstanden habe. Diesen Aufklärungsbogen (5 Seiten) habe ich vollständig gelesen und die Fragen zu meiner Krankengeschichte (Anamnese) nach bestem Wissen beantwortet. Im Aufklärungsgespräch mit Frau/Herrn Dr. _____ wurde ich über den Ablauf der geplanten Operation, deren Risiken, Komplikationen und Nebenwirkungen in meinem speziellen Fall und über die Vor- und Nachteile der Alternativmethoden umfassend informiert.

I have seen and understood the film about the operation that has been scheduled for me.

Den Informationsfilm über die bei mir geplante Operation habe ich gesehen und verstanden.

I hereby deliberately waive my rights to more detailed explanations. However, I also confirm that I have been informed by the attending physician of the necessity of this operation, of its type and extent, and of the circumstance that this operation has its risks. I have answered the questions about my medical history in full and to the best of my knowledge.

Ich verzichte bewusst auf eine ausführliche Aufklärung. Ich bestätige hiermit allerdings, dass ich von dem behandelnden Arzt über die Erforderlichkeit des Eingriffes, dessen Art und Umfang sowie über den Umstand, dass der Eingriff Risiken birgt, informiert wurde. Die Fragen zu meiner Krankengeschichte (Anamnese) habe ich nach bestem Wissen vollständig beantwortet.

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 also consent to all required auxiliary and follow-up measures (e.g. removal of cysts, synovial membrane growths, tendon agglutinations).

Ich versichere, dass ich keine weiteren Fragen habe und keine zusätzliche Bedenkzeit benötige. Ich stimme der vorgeschlagenen Operation zu. Ich willige ebenfalls in alle notwendigen Neben- und Folgemaßnahmen (z.B. Entfernung von Zysten, Gelenkhautwucherungen, 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.

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
[Unterschrift der Patientin / des Patienten / Vormund]

Copy/Kopie: received/erhalten

waived/verzichtet

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