

Before, during and after the operation

Dear Patient,

Please note that the following information and tips represent only general guidelines. It is therefore essential that your own doctor advises you personally with regard to your specific needs.

Preparation for surgery

Generally, a decision for an artificial joint is not made overnight, but rather considered carefully over a longer period. The doctor in the clinic will first carry out thorough physical **suitability examinations** on you and, if necessary, take new x-rays before an artificial joint is even considered. As a general rule, non-surgical treatment measures (particularly physical exercises, sometimes physiotherapy, adjustment of load and activities) should be tried exhaustively first.

Only if pain from exertion or movement in the damaged joint is affecting quality of life so severely that any activity is a torture, does the question of fitting an artificial joint arise, i.e. it is not the *changes* in the joint that govern the decision for surgery, but rather the *extent of the symptoms* and thus the suffering of the patient, regardless of his or her age, provided general condition is not an issue. Thus, the doctor decides when the right moment has come and decides with you which type of prosthesis is most suitable for you.

Ask your doctor about the possibility or need for **donating your own blood**. Whether this request can be met depends on the doctor and hospital.

Your doctor will also be happy to help you register for an initial advisory consultation in a suitable clinic.

Please bring with you to this **advisory consultation**:

- insurance card
- referral letter from your doctor
- all (including old) x-rays, if available
- medications you (have to) take at the moment

Here, the clinic doctor will discuss the next steps with you and an actual date for the operation will be set, depending on the urgency. From the examination results and x-rays, the clinic doctor will decide which endoprostheses and fixings in the bone would be suitable for you. All further appointments will then be held in good time before the operation.

Use the time before the operation to prepare for the period afterwards:

Speak to your doctor about the possibility of physiotherapy before the operation and reorganise at home so that after the operation you can learn to cope on a day-to-day basis as quickly and easily as possible:

- Check the **entrance area**, to see whether there are places you could trip up, for instance on loose foot mats or raised ends of rugs.
- Worn-down steps in the **stairwell** can be repaired with non-slip coverings. Fit a banister and handrail on every set of stairs.

- Organise a seat in the **hall** and a central depository for keys and post; this can save you unnecessary trips
- Consider getting a cordless **telephone**, so that you don't have to walk a long way in a hurry.
- Remove slippery mats which you could fall over in the **bathroom**. Perhaps you can even get handrails to help you in and out of the bath, and there are attachments available to rent for low toilets.
- Your **bed** should be easily accessible and provide a comfortable sitting position. If this is not the case, adjust it and add an extra mattress. Store a torch in the bedside table in case you can't reach the light switch from the bed.
- In the **kitchen**, place all the things you need most often within easy reach. A hostess trolley helps avoid unnecessary trips. Ready-made or frozen meals which you only need to warm up make life easier for you when you first come home.
- Remove everything you could trip over in the **living room**, such as loose cables or rugs with raised, bulky edges.

Do everything you can to ensure that you are in the best possible general form, this is the best precondition for your endoprosthesis:

- Check your weight. Being **overweight** is an enormous strain even for a healthy joint and should be avoided if at all possible for a damaged or artificial joint. Change your diet far enough ahead to a low-calorie regime with lots of fresh vegetables, fruit, cereals and milk products and try to avoid alcohol, tobacco and cigarettes.
- **Physiotherapy** is sensible even before the operation, since specific exercises can encourage muscle build-up and thus create a stable environment for your artificial joint. Move your leg, even if you are in pain, otherwise the unnatural carriage will have a detrimental effect on your muscles. Patients who do specific physiotherapy before the operation often regain good mobility more rapidly afterwards.
- **IMPORTANT:** It is possible that you are **allergic** to certain materials. If this is the case with nickel or chrome (jewellery, glasses, braces, buttons, zips), please tell your doctors as soon as possible. Other allergies too (e.g. antibiotics, plasters, iodine, etc.) should be declared and your allergy passport shown.
- **IMPORTANT:** Inform your doctor in good time of all **medications** you are taking. Even a regular dose of Aspirin can represent an increased risk of bleeding. When you are admitted to hospital later, it is best to take a medication list with a dosing table of all the medications you have taken in the last month.

In the hospital

What you should take to the hospital:

Personal items:

- toiletries (toothpaste and toothbrush, soap, comb and brush, etc.)
- dressing gown
- pyjamas, night shirt, night dress
- track suit with wide leg-holes
- non-slip, flat shoes and slippers
- long shoehorn
- swimming costume
- your own walking aid (if you have one)
- entertainment (books, writing blocks, walkman with headphones)
- important addresses and telephone numbers
- a little money for a telephone card, cafeteria (no valuables or large sums of money)
- telephone card for public telephones

Documentation:

- any available x-rays
- examination documentation from your GP/specialist
- medication list from your referring doctor (if poss. with dosages)
- referral slip from the treating doctor
- insurance card, any additional insurance documentation

The Operation

It is possible to have the operation carried out under local or general anaesthetic. The advantage of local anaesthetic is that it has less of an effect on your general condition, that's why most patients these days are operated on under local anaesthetic. In addition, you are given an additional sedative and can, if you wish, follow the operation - whilst at the same time listening to music through headphones and without feeling any pain.

The anaesthetist comes to see you the day before the operation and discusses your anaesthesia and the course of the operation. You will then select the medications you can tolerate best and the type of anaesthesia most suitable for you.

After it is fitted, the mobility of the artificial joint is tested and only then is the wound closed. Drainage tubes placed in the wound prevent the collection of blood. Finally, a compression bandage is applied and a first x-ray taken after the operation.

The whole procedure generally only takes one to two hours, the overall period in hospital is approx. two weeks.

After the Operation

Just one or two days after the operation you start your first movement exercises, because this so-called "**early mobilisation**" stimulates the metabolism. First of all it is "muscle pumping" in the legs that is particularly encouraged. Once the wound drains are removed you can start active movement exercises.

Also on the first day you start **breathing exercises**, and you may also be able to start various exercises - sitting on the edge of the bed - to stimulate your circulation.

The wearing of **compressions stockings**, which will be provided by the hospital staff, is recommended until approximately one month after the operation and you will also be given medication before and after the operation to reduce the risk of thrombosis and pulmonary embolism.

As soon as your **surgical wound** is completely dry, you may take a shower, after consulting the nursing staff, but please do not on any account rub the wound when drying yourself, just dab it gently dry.

From the third day after a **hip operation**, you can look forward to **bending and stretching exercises** and tensing exercises for the muscles (e.g. clench buttocks and release), lying down at first and then later, with the help of the physiotherapist, also whilst sitting and standing.

From the third day after a **knee operation**, you will be doing **bending and stretching exercises** on the affected knee joint actively and passively supported (by way of a movement brace).

Generally, a patient gets out of bed for the first time on the second day after the operation. Because of pain from the wound, help is required here.

With both operations, you will start around the third day after the operation with the first **walking exercises** in the wheeled walking frame or with two crutches. From the sixth day, the symptoms are considerably reduced and you can walk with crutches. But for about six weeks you should avoid putting too much strain on the hip joint by using two sticks for walking, although walking aids are in the first instance there to help you learn to walk with confidence and not to take your weight. After six weeks, you will only need crutches for walking longer distances.

Tips for getting about on crutches:

- When standing, both sticks should be slightly in front of and alongside your feet.
- Keep your hips as straight as possible and avoid extreme inward or outward movements.
- Support yourself properly when walking on the hand grips of your crutches. The elbows should be lightly bent (never completely straight as this puts too much strain on the elbow joint)
- Make sure you are bearing your weight on your hands and not on your underarms.

Rehabilitation

In your hospital, the type and extent of rehabilitation measures will be discussed with you. You will learn which measures aim to achieve which goals and how long rehabilitation takes. Usually three weeks rehabilitation is recommended and then a further six weeks of physiotherapy. These rehabilitation measures can be carried out both on an outpatient basis and during a stay in a rehabilitation clinic.

In the case of young active patients who are still in full employment, **outpatient rehabilitation** in a physiotherapy surgery is appropriate. Your therapist will consult with the doctor in the clinic as to which treatment is best suited to your needs.

In many cases the follow-on treatment is carried out in a rehabilitation clinic directly after a stay in hospital. This is known as **in-patient rehabilitation**. The application for follow-on treatment is completed in the hospital. You should certainly take with you to the rehabilitation clinic the x-rays taken after the operation and a copy of your surgical report, this ensures that the treatment can be selected individually and effectively.

Back home

Regular check-ups during the first year are important! Take advantage of your doctor's offer of regular check-ups. It is important that the continuing physical integration of your "new" joint is monitored.

The first check-up should take place after six and the second after twelve weeks. Your doctor will determine the other check-up dates. Here it can be seen by x-ray whether the prosthesis is accurately positioned and fixed in place, whether there are changes, such as calcification on the capsule, and how the bone is reacting to the prosthesis. In addition, your everyday and regular movements will be checked.

After a few months and in consultation with your doctor, you can enjoy life to the full again - at work and at home. Enjoy your hobbies and sport.

But avoid extreme sporting exertion, such as squash, tennis or Alpine skiing, avoid jolts, sharp turns and lifting heavy loads and instead enjoy joint-friendly sports like swimming, cycling, walking, cross-country skiing or keep-fit exercises.

Also, ask your doctor about hip or knee exercises for at home.

One year after the operation another check-up is required. Further check-ups generally depend on whether you have symptoms or not. Generally, check-up examinations are done at two-year intervals; in the case of younger patients who have no symptoms intervals of three to five years are sufficient.