

A photograph of an elderly couple walking a small, fluffy dog on a gravel path in a park. The man is on the left, wearing a white sweater and dark trousers, with his arm around the woman. The woman is on the right, wearing a white shirt, a pink cardigan, and beige trousers, holding a blue leash. The dog is a small, white and brown fluffy breed. The background is a lush green park with trees and a bench.

PATIENT GUIDE
knee & hip

JOINT REPLACEMENT SURGERY

Bring this guide with you when you
come to Coxa

Tekonivelsairaala

COXA

Coxa Hospital for Joint Replacement

Coxa is Finland's largest hospital specialized in joint replacement surgery. We perform more than 9,500 joint replacement procedures annually and employ over 440 leading professionals in the field.

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Entrance



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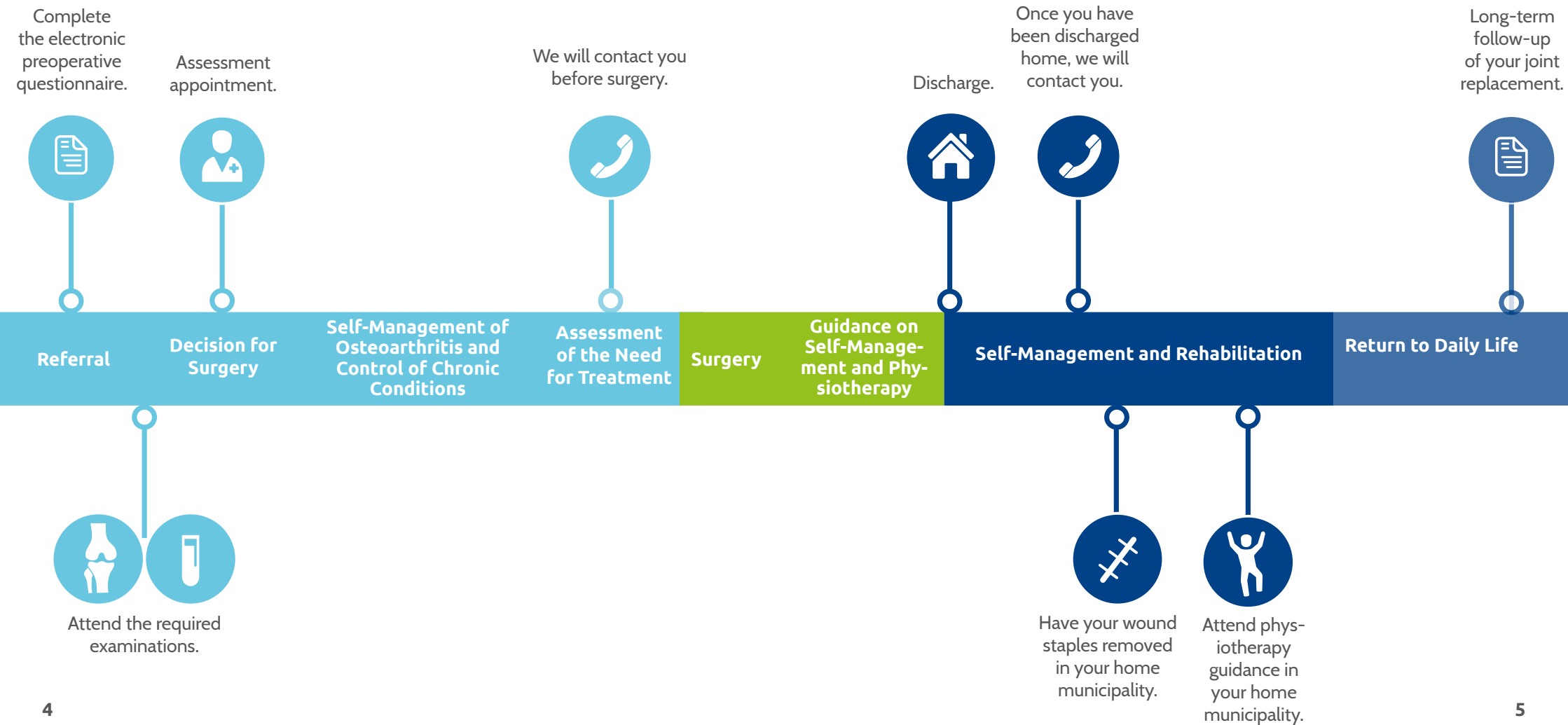
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CARE PATHWAY

PREPARING FOR SURGERY

JOINT REPLACEMENT SURGERY

RECOVERY AND EXERCISE



PREPARING FOR SURGERY



Osteoarthritis and Its Effects

How Does Osteoarthritis Develop?

Osteoarthritis is the most common reason for joint replacement surgery. It develops slowly over the years. As the disease progresses, the articular cartilage gradually becomes damaged and may even wear away completely. When this happens, the bone surfaces rub against each other, causing irritation and inflammatory changes in the joint lining, as well as swelling and stiffness in the joint. The body is unable to repair damaged cartilage, which is why symptoms may increase over time. However, osteoarthritis does not progress in the same way for everyone. Its progression is individual.

Do You Have Risk Factors?

There are many factors that contribute to the development of osteoarthritis. These factors include:

- heredity
- overweight
- previous joint injuries and joint damage
- limb malalignment
- physically demanding work
- ageing, which weakens the mechanical properties and metabolism of cartilage.

Identifying risk factors will help you and healthcare professionals plan the most effective treatment before surgery.

Pain and Stiffness Are Common Symptoms of Osteoarthritis

When articular cartilage becomes damaged, following symptoms can occur in the joint:

- In the early stages, osteoarthritis pain fluctuates and worsens with movement, for example after strenuous exercise, climbing stairs, or long walks, but resting usually relieves the pain.
- Stiffness is particularly noticeable in the morning and when starting to move.
- Swelling and limitations in movement develop gradually.

As osteoarthritis progresses and the cartilage surface wears away almost completely, joint pain becomes more persistent. Later, pain at rest and disturbed sleep may occur. Pain does not necessarily progress in a straightforward manner. Everyone experiences pain differently: for some, it fluctuates for a long time, while for others it gradually becomes an everyday burden. Advanced osteoarthritis can make daily activities and mobility more difficult.

Take an Active Role in Self-Managing Osteoarthritis

The treatment for the osteoarthritis aims to maintain function, reduce the pain and slow the progression of the disease. Surgery becomes an option only after all other treatment methods have been used. It is important to remember that although a joint replacement reduces pain, it does not fully function like a healthy joint. Therefore, proactive self-management is an important part of achieving a successful outcome.

Daily Exercise Strengthens Your physical function

Regular physical activity is the most effective way, according to research, to slow the progression of osteoarthritis and reduce pain. Exercise improves muscle activation, blood circulation, muscle strength, and joint mobility. Both strength training and endurance exercise are effective, as they reduce pain and improve function in people with osteoarthritis.

Exercise in a variety of ways to support muscles and joint movement, these exercises include following:

- range-of-motion and mobility exercises
- muscle-strengthening exercises
- aerobic exercise that does not place excessive strain on the painful joint (light everyday physical activity).

Use pain medication to support physical activity or reduce the intensity of exercise if the joint becomes painful with exertion. Walking aids can make moving around easier. Suitable forms of exercise include:

- cycling
- water-based exercise
- gym training
- gymnastics
- light everyday physical activity.

Familiarize yourself with the exercises in the pages 44-57. Learn how to perform them before surgery, as this will make your postoperative exercises easier. For more information about exercise recommendations for osteoarthritis, please visit: www.kaypahoito.fi.

Non-Pharmacological Pain Management Can Make Daily Life Easier

Pain can be relieved through many everyday strategies, and their benefits are well established. For example, you can try:

- adjusting your level of activity: use assistive devices when needed and shorten walking distances
- cold or heat therapy, which may help relieve pain and swelling
- gentle massage
- relaxation and adequate sleep.

For people with osteoarthritis who are overweight, dietary changes combined with exercise are recommended. Weight loss reduces pain and improves physical function. You can read more about weight management and healthy nutrition on pages 20-21.

Medication Relieves Pain and Makes Movement Easier

There is no cure for osteoarthritis, but medication can effectively relieve pain and support active self-management.

- Paracetamol is the first-line pain medication.
- If it does not provide sufficient relief, anti-inflammatory pain medications may be used if they are suitable for you.
- If anti-inflammatory pain medications are not effective enough or are not suitable, your doctor may consider prescribing opioids.

If needed, you can request prescriptions for pain medication from your local health centre or occupational healthcare provider.

Please note: Glucocorticoid or hyaluronate injections must not be administered into the joint to be operated on if surgery is less than 3 months away, as they increase the risk of infection.

Learn Different Ways to Manage Pain

Pain is not caused by the joint alone. The overall well-being of both body and mind supports self-management of osteoarthritis as well as preparation for surgery.

Previous experiences of pain also influence how pain is experienced in the future.

- **Supportive Social Relationships Help Relieve Pain**
Support from family and friends, conversation, and spending time together reduce stress and loneliness. Positive social interaction helps calm the nervous system and may reduce the experience of pain.
- **Managing Stress Helps Calm the Body**

Prolonged stress makes the nervous system more sensitive to pain. Gentle outdoor activity, breathing and relaxation exercises, music, enjoyable activities, and adequate sleep can help you feel better. Even a few peaceful moments each day can make a difference.

- **Processing Emotions Reduces Emotional Burden**
Feelings related to osteoarthritis and pain, such as worry, irritation, or frustration, are normal. Sharing these feelings with someone close to you or with a healthcare professional can ease emotional strain and may reduce pain.
- **Positive Thinking Supports Recovery**
Positive thinking means noticing the things that are going well. It helps calm the nervous system, reduces muscle tension, and supports coping. Even small steps forward are meaningful.

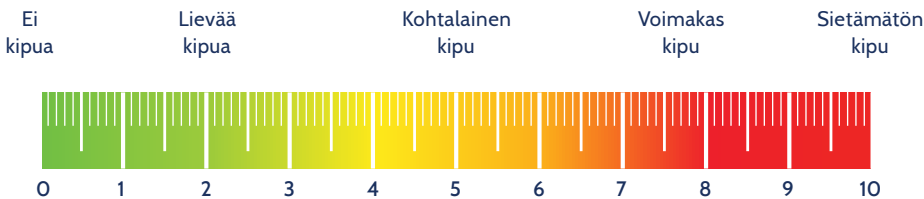
When your mind has time to rest and recover, your body is better able to cope as well.

Learn to Assess the Intensity of Your Pain

A numerical rating scale from 0 to 10 is used to assess pain. It helps you monitor changes in pain intensity and describe them accurately to healthcare professionals.

Pain intensity is expressed as a number, where 0 means “no pain” and 10 means “the worst imaginable pain.”

- 0 – no pain
- 1-3 – mild pain, minor sensations, little or no interference with daily activities
- 4-6 – moderate pain, already affects movement and daily life
- 7-8 – severe pain, makes physical function more difficult
- 9-10 – unbearable pain or the worst imaginable pain



You can practise using the scale in your daily life and learn to recognize whether your pain varies throughout the day. Choose one day each week and record which number best describes your pain:

- in the morning, evening, or at night
- at rest, during movement, or during physical exertion.

In the early stages of osteoarthritis, pain may be rated 3–4 (mild to moderate) during physical exertion and 0–1 at rest. As the disease progresses, these values may increase to 5–6 (moderate pain that is clearly affecting daily life).

When you learn to describe the intensity of your pain with a number, there is no need to explain it in many words. The numerical rating scale is also used after surgery to support pain management and rehabilitation. Giving your pain a number:

- makes it easier to discuss pain and pain management
- helps you and healthcare professionals monitor your pain and recovery together.

Please tell your healthcare team if you are concerned about pain after surgery.

Assessment of the Need for Treatment – Decisions Are Made Together

Is Joint Replacement Surgery the Right Solution for You?

The decision to proceed with joint replacement surgery is always based on a joint assessment by the orthopaedic surgeon and the patient. If you wish, you may bring a family member or friend with you to your first assessment appointment.

The most common reason for surgery is advanced osteoarthritis that affects physical function and everyday life. Surgery may be considered when:

- pain limits normal mobility
- pain occurs also at rest or during the night
- medication, exercise, and other self-management measures are no longer sufficient to relieve symptoms

The goal of joint replacement surgery is to improve physical function and reduce pain. For some people, this means managing daily activities more easily. For others,

it means being able to continue hobbies and maintain an active lifestyle.

If you have advanced osteoarthritis but your joint is pain-free and your physical function is good, surgery is not yet necessary. Continue exercising and maintaining your muscle strength, and contact your doctor if pain begins to interfere with your daily life.

If the orthopaedic surgeon assesses that your osteoarthritis is still in its early stages, your symptoms and the progression of the disease will be reassessed later as needed. The decision to proceed with surgery is influenced by the condition of the joint, your overall health, and the risks associated with surgery.

Risks Associated with Surgery: What Can You Do to Reduce Them?

At Coxa, joint replacement surgery is a safe procedure, and serious complications are rare. However, all surgical procedures involve risks, which you can discuss with your orthopaedic surgeon before making a decision.

At Coxa, the risk of complications leading to revision surgery is less than 2%. Careful planning, advanced surgical techniques, and individually tailored medication significantly reduce these risks.

Possible risks include:

- wound infections and prosthetic joint infections: at Coxa, the risk of prosthetic joint infection within one year after surgery is less than 1% (the generally accepted level is below 2%)
- deep vein thrombosis
- bone fractures during surgery
- dislocation of the joint
- risks related to anaesthesia and the surgical procedure
- worsening of existing medical conditions
- mechanical problems with the joint replacement (probability during the first 10 years < 5%).

You can reduce these risks yourself by optimizing your health, exercising regularly, managing your weight, taking care of your skin and oral health, and avoiding tobacco products before surgery (read more on pages 16–22).

The Choice Is Yours

You always have the right to participate in decisions concerning your own care. If surgery is recommended, you have the right to consent for the joint replacement or to decline it. Discuss the benefits, alternatives, and associated risks of surgery with your care team, so that you can make a decision that feels right for you. You also have the right to receive good pain management regardless of whether you choose to undergo surgery or not. Discuss any questions related to pain management with your local health centre or occupational healthcare provider.

Recovery after joint replacement surgery usually takes several weeks, and physical function returns gradually over the following months. The length of sick leave is individual and depends on the nature of your work and the progress of your recovery. At Coxa, a sick leave certificate is issued for four weeks. If you need an extension of your sick leave, you can discuss this with your local health center physician or with your occupational healthcare provider.

The costs of surgery can be found on our website at www.coxa.fi.

What Happens During Joint Replacement Surgery?

During joint replacement surgery, the damaged joint surfaces are removed and replaced with an artificial joint, which improves joint function and reduces pain. The type of surgery and surgical technique are selected individually based on your specific situation.

Which Joint Replacement Implant Is Right for You?

The joint replacement implant is always selected individually. Factors that influence the choice include:

- age
- the severity of osteoarthritis, the structure and quality of the bone, and the condition of the soft tissues
- level of physical activity
- previous injuries or other changes in the joint.

Joint replacement implants are made different types of material such as cobalt-chromium, steel, ceramic, titanium, and high-grade plastics. At Coxa, we use reliable implant models with proven long-term durability. Joint replacement implants are supplied by manufacturers including Zimmer Biomet and DePuy Synthes.

Knee



The knee joint is opened, and the worn joint surfaces are exposed.

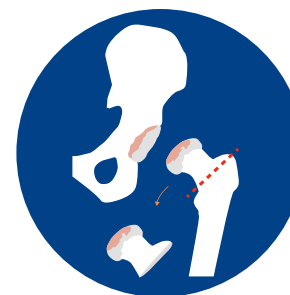


The surface of the femur is shaped to fit the femoral component. The surface of the tibia is prepared for the tibial component.

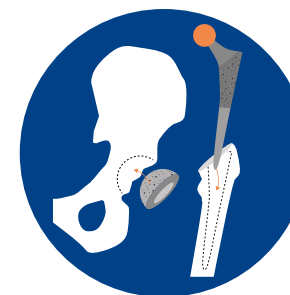


The joint replacement components are usually fixed in place using bone cement.

Hip



The hip joint is opened, and the worn joint surfaces are exposed. The femoral head is removed.



The acetabulum is shaped to fit the cup component. A space for the stem component is prepared in the medullary canal of the femur.



Some joint replacement components have a porous surface that allows bone to grow into them. Alternatively, the components may be fixed in place using bone cement.

Looking After Your Health Helps Improve the Safety of Your Surgery

The success of joint replacement surgery depends greatly on your overall health being as good as possible.

Make Sure Your Chronic Conditions Are Well Managed

Before surgery, it is important to ensure that any chronic medical conditions are managed as well as possible. This reduces surgical risks and supports recovery.

It is important to make sure that:

- your haemoglobin level is normal (within the laboratory reference range)
- your diabetes is under the best possible control (HbA1c below 60 mmol/mol)
- diseases of the heart, lungs, and circulatory system are well controlled
- if you have sleep apnoea, your CPAP or other treatment is in use
- your blood pressure is under control
- urinary symptoms related to an enlarged prostate have been treated before surgery
- your medication list (prescription medicines, over-the-counter medicines, and herbal products) is up to date.

Good control of chronic conditions:

- improves surgical safety
- promotes wound healing
- reduces the risk of infection
- supports faster recovery.

Discuss your chronic conditions with your local health centre physician or occupational healthcare physician well in advance so that any necessary changes to your treatment or medications can be made before surgery. If you have ongoing examinations or treatments (for example, sleep apnoea investigations or cancer treatments), make sure they are completed before your joint replacement surgery in collaboration with your doctor.

Stop Omega-3 Supplements and Herbal Products Two Weeks Before Surgery

Omega-3 supplements and many herbal products can affect blood clotting and increase the risk of bleeding during surgery. Therefore, it is important to stop taking

them at least two weeks before joint replacement surgery.

The Impact of Low Haemoglobin (Anaemia) on Joint Replacement Surgery

A low preoperative haemoglobin level, known as anaemia, increases the risk of surgical complications, such as cardiac complications, infections, and deep vein thrombosis. In addition, surgery itself lowers haemoglobin levels. Studies show that, for example, after knee replacement surgery, haemoglobin decreases by an average of 30-40 units.

For this reason, it is important that your haemoglobin level is as good as possible before surgery. If investigations of anaemia do not identify a clear treatable cause, surgery may still proceed. However, unexplained or untreated anaemia will result in postponement of the surgery.

The Impact of Sleep Apnoea on Joint Replacement Surgery

Sleep apnea is a condition that affects your breathing while you are asleep. Most significant risk factor is excess weight. Untreated sleep apnoea increases the risk of complications related to joint replacement surgery, such as infections, deep vein thrombosis, pulmonary embolism, and postoperative confusion. Treating sleep apnoea can reduce these risks.

If you have symptoms that are indicated having a sleep apnoea, such as disturbed sleep or snoring, pauses in breathing during sleep, daytime fatigue, dry mouth, memory or concentration problems, the need to urinate during the night, or morning headaches, it is important to investigate the possibility of sleep apnoea before surgery.

You can assess your risk of sleep apnoea by completing the STOP-Bang questionnaire online: <https://www.kaypahoito.fi/nix02712>.

Please inform Coxa if there are any changes in your health after the decision for surgery has been made. Such changes may include, for example, a worsening of an existing condition, changes to your medication, or new diagnoses.



Take Care of Your Oral Health Before Surgery

Infections of the mouth and teeth increase the risk of a prosthetic joint infection because bacteria from the mouth can spread through the bloodstream to the joint replacement. For this reason, a dental examination before surgery is an important part of safe preparation.

When Is a Dental Statement Required?

A statement recorded in the MyKanta (OmaKanta) service by a dentist is required if:

- you have chronic medical conditions (such as diabetes, rheumatoid arthritis, or heart disease)
- you smoke regularly
- you consume large amounts of alcohol.

The statement confirms that there are no infections in your mouth and that your oral health has been treated before surgery. The statement is valid for 12 months. At Coxa, the statement is checked through the MyKanta service.

What Should You Do?

- Book an appointment with a dentist at your local health centre or a private dental clinic.
- Tell the dentist that you are scheduled for joint replacement surgery and need an oral health assessment or statement.
- Have any cavities, gum infections, and teeth requiring extraction treated well before surgery.

Make Sure Your Skin Is Healthy and Intact

Your skin must be healthy and intact before surgery to keep the risk of infection as low as possible. Bacteria can enter the bloodstream through breaks in the skin and cause a prosthetic joint infection.

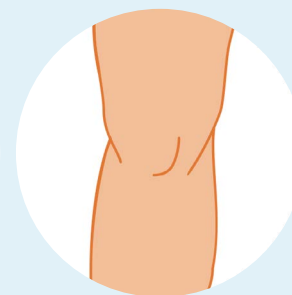
Please Note the Following:

- If skin damage is detected shortly before surgery, the procedure may need to be postponed.
- If you visit a podiatrist or foot care professional, do so no later than 2 weeks before surgery.
- Trim your nails one week before surgery so that any accidental skin damage has time to heal.
- If you wish to shave your lower legs, do so one week before surgery to allow the skin time to heal.
- A nurse at your local health centre can advise you on skin care.

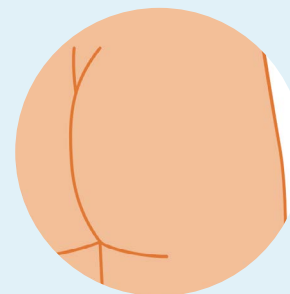
Check Your Skin Condition Before Surgery



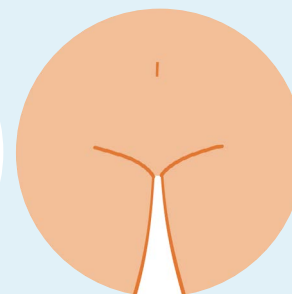
1. Between the toes



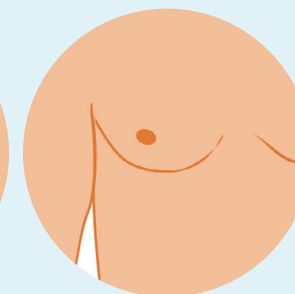
2. Surgical site



3. Surgical site



4. Groin area



5. Under the breasts

Your skin should be healthy and intact, with no:

- infected rash
- skin maceration or chafin
- infections between the toes
- leg ulcers
- nail fold infection
- burns.

Make Choices That Support Your Recovery

Pay Attention to Nutrition and Weight Management

Good nutrition helps your body recover and promotes wound healing. Improving your eating habits already several weeks before surgery supports a successful recovery.

Basic Nutritional Guidelines Before Surgery

- Eat regularly, for example, 3 main meals and 1-2 snacks per day. Keeping your blood sugar stable helps reduce snacking.
- Increase your protein intake, as protein is needed for wound healing, maintaining muscle strength, and fighting infections.
- Eat vegetables, fruits, and berries every day, as they contain vitamins and minerals that support tissue repair.
- Reduce your intake of sugar and refined carbohydrates.
- Use the plate model when planning your meals ($\frac{1}{2}$ of the plate vegetables, $\frac{1}{4}$ protein, $\frac{1}{4}$ whole-grain carbohydrates).
- Drink approximately 1-1.5 litres of water daily. Water is the best drink for quenching thirst.
- Avoid sugary and artificially sweetened beverages.
- Remember that your fluid requirements vary according to age, activity level, weather conditions, and medication.

Why Is Weight Management Important?

Being overweight:

- makes surgery technically more challenging
- slows wound healing
- increases the risk of infections and complications
- increases the risk of a prosthetic joint infection.

The impact of diet on weight management is often greater than that of exercise. A general rule of thumb for weight loss is that 80% is achieved through dietary changes and 20% through exercise. Although physical activity is extremely important for overall health, muscle strength, and maintaining weight loss, the greatest weight reduction is achieved by changing eating habits. This is important to know, especially if osteoarthritis pain limits your ability to exercise.

Even Small Changes Can Make a Big Difference

You do not need to make perfect changes all at once. Even small changes can quickly improve how you feel and help you cope better.

- Add more vegetables to your meals.
- Replace some high-fat choices with lighter alternatives.
- Cut down on sugary drinks.
- Eat more slowly and at regular times.
- Support from family and friends, as well as group counselling, can increase your chances of success.

Good nutrition helps your body recover from surgery and reduces the risk of complications.

Good nutrition, adequate sleep, appropriate physical activity, and stress management work together to regulate body weight. If one of these factors is out of balance, weight management becomes more difficult.



Stop using alcohol and other substances before surgery – you can directly influence your own recovery

Heavy or regular use of alcohol or other intoxicating substances must be stopped **at least two months** before surgery. If stopping feels difficult, seek help and support from the substance abuse nurse at your local health centre or join a peer support group.

Why is substance use harmful before surgery?

Substance use:

- increases the risk of accidents
- can be dangerous when combined with medications used during and after surgery
- weakens the body's normal functions and increases the risk of complications
- may cause withdrawal symptoms that make recovery more difficult and slow down rehabilitation
- may prevent joint replacement surgery if the use is heavy and ongoing..

Substance use is assessed before surgery using the AUDIT questionnaire, which is completed by all patients. The purpose of the questionnaire is to determine the amount of alcohol and substance use and identify any need for support before the procedure.

Quit smoking – significant benefits can be seen within just a few weeks

Smoking and tobacco products (such as snus) must be stopped as soon as surgery begins to be planned. The greatest benefit is achieved when all tobacco products are discontinued at least two months before surgery.

Tobacco products slow recovery in several ways.

Smoking:

- delays wound healing and increases the risk of wound infection
- impairs circulation and oxygen delivery to tissues
- increases the risk of blood clots
- increases the risk of breathing problems related to anaesthesia and surgery
- slows bone healing
- affects the absorption and effectiveness of medications, which may make pain management more difficult.

Please note: Every smoke-free day improves your body's function and supports your recovery.

Coxa is a smoke-free hospital. If you are still in the process of quitting or need support, you may use nicotine patches or nicotine gum to help relieve withdrawal symptoms if necessary.

Prepare for surgery and your return home in advance

You will be discharged on the day of surgery or the following morning

At Coxa, the length of stay is short. Most patients are discharged on the day of surgery or the following morning. The short hospital stay is based on modern treatment practices: the risk of infection is reduced, recovery is faster in the familiar home environment, and advanced care protocols enable safe discharge.

Prepare your home environment to support recovery

Plan in advance how you will manage at home during the first few days after surgery.

- Ask a family member or friend to support you during the days following surgery, as this can make everyday life easier.
- If you are discharged on the day of the surgery, you must have responsible adult to stay with you until the following morning. This will increase your safety.
- Plan practical daily arrangements in advance:
 - Who will do the grocery shopping and collect prescriptions from the pharmacy?
 - How will meals be arranged for the first few days?
 - How will household chores be managed?
- Be prepared to exercise even if you experience pain. Functional exercises are an important part of recovery.
- Take care of your mental well-being. Calm mind and relaxation will support your recovery.
- Read the discharge instructions on page 34 of this guide and prepare accordingly in advance.

Borrow assistive devices and start exercising

Borrow any necessary assistive devices from your municipality's assistive device lending service well before your surgery. **Coxa does not provide an assistive device loan service.**

After knee or hip replacement surgery, a walking aid is needed to help ensure balance. During the recovery period, control of the operated leg may be reduced, initially because of the anaesthetic and later due to pain, swelling, and muscle weakness. Hip replacement patients will also need dressing aids and may require raised seating for chairs and the toilet to avoid extreme hip positions and reduce the risk of dislocation. Bring any assistive devices you use (crutches or a rollator) with you when you come for surgery. Practice using these devices before your operation so that you can move around confidently from the very first day.

Required assistive devices

For all patients:

- crutches or a rollator.

For hip replacement patients, additionally:

- raised seat cushion and raised toilet seat
- reacher/grabber
- sock aid
- bed risers (if needed)
- shower chair (if needed)

If both knees are operated on at the same time:

- raised toilet seat and bed risers.

Purchase two large reusable cold packs for use at home. Cold therapy helps reduce swelling and relieve pain.

Plan your journey home



You will be discharged from the hospital either on the day of surgery or the following morning. You can travel home sitting in a passenger car. Arrange your transportation home in advance, either with a family member or friend or by booking a taxi.

- *Arrange your transportation in advance with the person who will pick you up.*
- *Make sure they are available to collect you on the planned discharge day, including during the morning if necessary.*
- *Inform them that they should be prepared to pick you up on the agreed day, even though the exact discharge time will only be confirmed on the day of discharge.*
- *If you plan to use a taxi, see page 62 of this guide for information about Kela travel reimbursements.*

Preparation Checklist

Am I ready for surgery?

Support and managing daily life

- I have arranged for a family member or friend to support me at home during the first few days after surgery, or I have arranged other assistance.
- I have planned meal arrangements and agreed on who will help with grocery shopping and pharmacy visits if needed.

Health status before surgery

- My chronic conditions are as well controlled as possible (discussed with occupational health services or my primary care physician).
- My haemoglobin level is within the normal reference range.
- If I have diabetes, my HbA1c level is well controlled and below 60 mmol/mol.
- If I do not have diabetes, my HbA1c level is below 48 mmol/mol.
- I am aware of all the medications I use and have an up-to-date medication list.
- I have taken care of my oral and dental health (the required dental statement is available in My Kanta).
- I have checked the condition of my skin (page 19) and confirmed that there are no rashes or breaks in the skin.
- I am taking care of my bowel function. However, I will not use laxatives on the day before surgery.

Use of products that may increase surgical risks

- I stopped smoking at least 2 months before surgery.
- I stopped taking omega-3 supplements and herbal products 2 weeks before surgery.
- I have not received injections (corticosteroid or hyaluronic acid injections) in the joint to be operated on if surgery is less than 3 months away.

Assistive devices and practising their use

- I borrowed the necessary assistive devices from my municipality's assistive device lending service.
- I practised walking with crutches and, if necessary, using stairs (page 49).
- I ensured that I can move around safely and without obstacles at home while using an assistive device.

Exercise before surgery

- I started the initial exercise programme as described from page 46 of this guide onwards.
- I watched Coxa's patient education videos at www.coxa.fi or by scanning the QR code below.

Preoperative examinations

- Prescribed blood tests, including the X blood test, have been completed.
- Prescribed X-ray examinations have been completed.



What should I bring to Coxa?

Bring the following to the hospital

- Personal medications (insulin pens, inhalers, eye drops, hormone preparations, and medications requiring a special licence).
 - Other tablets that you take daily will be provided by the ward.
 - If you are staying at the patient hotel, bring all your regular medications with you.
- Crutches or a rollator.
- Mobile phone and charger.
- Easy-to-put-on, loose-fitting indoor shoes and comfortable clothes for the journey home.
- The CoxaPath app installed on your mobile phone or your Patient Guide.
- A bank card and Kela card for purchasing medications.
- Personal toiletries if you are staying overnight at the patient hotel or in the hospital.

If you use any of the following, bring them with you

- Blood glucose meter
- Eyeglasses and case
- Hearing aid and batteries
- Warfarin (Marevan) dosing schedule
- CPAP device

For patients with a pacemaker

- Bring your pacemaker card to every appointment.

Leave these at home

- Rings and other jewellery
- Cash

If you are quitting smoking

- If needed, you may bring nicotine patches or nicotine gum with you. Coxa is a smoke-free hospital.

What should I do the day before surgery?

- Check the condition of your skin (see page 19).
- Wash yourself thoroughly with soap and shampoo your hair.
- Remove nail polish, jewellery, and piercings.

When might joint replacement surgery need to be postponed?

For safety reasons, surgery may need to be postponed if there are factors that increase the risk of complications. Examples include the following:

- **Dental treatment is still ongoing**
If you have had a tooth extraction too close to the surgery date or root canal treatment is still in progress, surgery will be postponed. After a tooth extraction, there should be approximately a two-week interval before surgery. All dental procedures should be completed well in advance of surgery.
- **You have a skin infection or a break in the skin**
Wounds, rashes, or skin infections may prevent surgery from being performed safely.
- **You develop an acute illness**
A cold, fever, or another sudden illness may be a reason to postpone surgery.
- **Abnormal test results**
Blood tests and other preoperative examinations must show satisfactory results to ensure that surgery can be performed safely.
- **Chronic conditions are not well controlled**
For example, diabetes and cardiovascular diseases should be well managed before surgery.

Notify Coxa immediately by calling +358 3 311 715:

- if you are unable to attend your surgery
- if you have any breaks in the skin
- if you have a fever or signs of infection
- if there is any other change in your health status.

How do I prepare for anaesthesia and safe surgery?

Fasting before surgery is important to ensure that spinal anaesthesia and light sedation can be administered safely.

- Do not eat or drink anything after midnight.
- On the morning of surgery, well before arriving at the hospital, you may drink one glass of water and one cup of black coffee or tea.

You will be informed of your arrival time on the day of surgery

Your arrival time for surgery is determined individually. If you do not use the CoxaPath app, you will receive your arrival time by telephone on the last working day before surgery between 1:00 p.m. and 3:00 p.m. (please note that the call will come from an unknown number). If you are travelling by a Kela-subsidised taxi, do not book the taxi until you have received your arrival time. This will help ensure that you arrive at Coxa at the correct time.

DAY OF SURGERY

SURGEON

Arrival time at Coxa:

Upon arrival, check in at the self-service kiosk using your Kela card or driver's licence.

Stop taking the following medications from:

Medications to take on the morning of surgery:

Preoperative tests required for surgery (Fasting is not required for these tests.)

X-bloodtest

- ☐ At your local municipal laboratory
- ☐ On the evening before surgery At Coxa inpatient ward, 2nd floor, by 8:00 p.m.
- ☐ At the Tays outpatient laboratory
- ☐ X blood test not required

Other examinations

Other important information:

SURGERY AND RECOVERY



This Is How Your Surgery Day Will Proceed

Arriving at Coxa

Come to Coxa on the morning of your surgery at the time you have been given. Check in at the self-service kiosk using your Kela card or driving licence. Wait in the lobby until nurse will come and call you.. Once you have changed into patient clothing, you will receive premedication and wait to be transferred to the operating department. You can still talk with the staff and ask any questions that may be on your mind.

Anaesthesia for Joint Replacement Surgery

Before surgery, the following preparations will be made:

- Your identity and the joint to be operated on will be confirmed, and the joint will be marked.
- An intravenous infusion will be placed in your hand, through which fluids and medications will be administered.
- You will receive an antibiotic and medication to reduce bleeding.

Spinal Anaesthesia – Effective and Safe Pain Relief

Most joint replacement surgeries are performed under spinal anaesthesia.

- The anaesthesiologist injects an anaesthetic into your lower back using a thin needle.
- The anaesthetic eliminates pain and temporarily removes muscle strength in your legs for a few hours, which is necessary for the procedure.

Relaxing Medication and Light Sedation

If you wish, you can receive relaxing medication before or during the anaesthesia. Based on your situation and health status, the anaesthesiologist will assess whether light sedation can be given to you. During sedation, you are in a relaxed, sleep-like state and may doze off. If light sedation is not possible, calming medication can still be given to keep you comfortable and relaxed.

In the Operating Department

A nurse anaesthetist will be with you throughout the surgery and will monitor your condition. You will usually spend about one hour in the operating department. After surgery, an X-ray of the operated joint will be taken to ensure that the joint replacement is correctly positioned. You will also meet your surgeon during the X-ray examination.

Postoperative Monitoring

During postoperative monitoring, your condition and recovery from the spinal anaesthesia will be monitored, including the return of movement in your legs. The duration of the anaesthetic effect varies between individuals and depends on the type and amount

of anaesthetic used. After surgery, you will receive pain medication according to the plan made by the anaesthesiologist. Report the intensity of your pain using the numerical rating scale from 0 to 10.

When your condition allows, you can use your mobile phone and your loved ones can contact you.

Be Active on the Day of Your Surgery



Start These Exercises as Soon as the Anaesthetic Has Worn Off

1. Actively bend and straighten your ankles to stimulate circulation. By using the muscles in your calves and lower legs, you reduce the risk of blood clots and improve blood circulation.
2. Keep your ankles flexed and press the backs of your knees against the bed. At the same time, tighten your thigh and buttock muscles. This exercise improves circulation in your lower limbs and gently exercises knee and hip extension.
3. Move the operated leg gently. Bend your knee and hip, then straighten the leg back onto the bed. Keep your foot in contact with the bed and slide it along the surface.



Start Moving and Practise Everyday Activities

Once movement and sensation have returned to your legs and your condition is stable, you will begin practising mobility under the guidance of a physiotherapist or nurse. All everyday activities are part of your rehabilitation: getting dressed, getting into and out of bed, using the toilet and walking. Your physiotherapist will provide instructions on walking technique, the use of assistive devices, and exercises to improve movement in the operated joint. Early mobilization is an important part of recovery and helps prevent postoperative complications.

Take an Active Role

You can contribute to your recovery and rehabilitation by being active. The goal is that, as soon as possible after surgery, you are able to sit up and eat in a seated position, move around your room with the help of an assistive device and manage daily activities independently. Your nurse will guide you in pain management. Please tell us openly about your condition and pain so that our staff can support your recovery in the best possible way.

Recovering at Home

You will be discharged either on the day of surgery or the following morning. Discharge is always assessed individually with safety in mind. You will receive the postoperative instructions given by your orthopaedic surgeon in writing, and you may not meet the surgeon before discharge. A nurse will review all discharge-related instructions with you.

It Is Safe for You to Go Home When:

- You can get out of bed and return to bed independently.
This shows that you can move around safely at home.
- You can walk in your room using an assistive device.
If you have stairs at home, you will also practise using stairs before discharge
- You can get dressed and take care of your personal hygiene.
This helps ensure that you can manage basic daily activities at home.
- Your postoperative pain can be managed with methods used at home.
Regular pain medication and cold therapy are sufficient to keep your pain under control.
- You know how to monitor your wound and change the dressing if necessary.
This helps ensure safe wound healing at home.
- You have a support person.
Support from a loved one during the first few days makes returning home safer and easier.

You Will Receive the Following When You Are Discharged:

- Any necessary prescriptions and medication instructions.
- Any required certificates.

You may ask a family member or friend to be present at discharge. You will also receive written instructions. Your individual care instructions, prescriptions, and the physician's discharge summary are available in MyKanta (OmaKanta). The nursing summary will be available in MyKanta on the day of discharge. You can read the operative report in MyKanta approximately one week later.

You can travel home by car with a family member or friend, by taxi, or, if necessary, by stretcher taxi. Arrange your transportation in advance and make sure that the person picking you up can collect you on the agreed day, including during the morning if needed.

How Might You Feel at Home?

It is completely normal for your general condition to be poorer at first than it was before surgery. This may be due to:

- postoperative pain
- a decrease in blood values and the resulting fatigue or dizziness
- the effects of medication
- changes in bowel function (constipation or diarrhoea).

You may experience:

- feeling unwell
- fatigue
- reduced tolerance for physical activity
- a greater need for assistance with everyday tasks.

All above is normal and temporary. Recovery is individual and happens gradually.

A Low Haemoglobin Level Is Usually Not a Cause for Concern

A decrease in haemoglobin levels is common after joint replacement surgery, and the level gradually improves with a balanced diet. A low haemoglobin level may cause dizziness and fatigue. If you wish, you may use an iron supplement that is suitable for you.

Manage and Control Your Pain

Learn to Understand Postoperative Pain

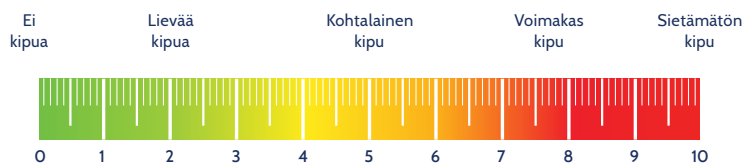
Pain is different after surgery than it was before surgery. The pain is no longer caused by osteoarthritis, but by tissue damage resulting from the operation. Surgery causes swelling, warmth, and a feeling of pressure in the operated limb.

- After joint replacement surgery, pain may be surprisingly intense, especially during the first weeks and months.
- Night pain is common and is caused by swelling in the surgical area and the healing process of the soft tissues.
- Pain gradually decreases over time.

Factors That Affect the Experience of Pain:

- the extent of tissue damage
- mood, emotions, and previous experiences of pain
- stress
- hormonal activity
- your overall life situation.

Pain intensity is assessed and described using a numerical scale from 0 to 10, where 0 means no pain and 10 means the worst pain imaginable. When you and the healthcare staff share a common understanding and use the same terms to describe pain intensity, it helps with the dosing of pain medication, the use of other pain management methods, and the planning of rehabilitation.



Use Pain Medication According to the Instructions You Have Been Given

Use pain medication regularly according to the instructions provided by the hospital. Pain medication enables you to move and exercise. Pain should not prevent you from performing exercises and participating in rehabilitation. Daily life at home is more active, so pain and swelling may temporarily increase.

When your pain begins to decrease, reduce your medication in the following order:

1. first discontinue pain medications that act on the central nervous system
2. next discontinue anti-inflammatory pain medications
3. discontinue paracetamol last.

Pain may remain fairly intense for several months after surgery, for example after physical activity. Continue using pain medication until walking and exercise can be performed with reasonably little pain.

If you need a renewal of your pain medication prescription more than one month after surgery, contact your local health centre or occupational healthcare provider.

Use Non-Pharmacological Pain Management Methods

- Move several times a day in short sessions.
- Avoid prolonged sitting and standing.
- Adjust your activity level by using assistive devices and shortening walking distances.
- Breathe calmly and relax (stress increases pain).
- Get adequate rest.
- Keep your leg elevated above the level of your heart.
- Use cold therapy for 10-15 minutes at a time, several times a day.
- Support the operated limb with pillows while sleeping so that the position feels comfortable.

Support Your Recovery at Home

Take Care of Your Stomach and Digestive Health

Use stomach-protective medication as instructed. Surgery places the body under stress, and pain medications may affect the stomach. Stomach-protective medication helps prevent irritation and damage to the stomach lining.

Because of the surgery and medication, bowel function may slow down. For this reason, it is important to support your digestive health from the very beginning:

- Eat fibre-rich foods and, if necessary, use stool softeners or support bowel function through your diet, for example by eating prunes, until your bowel function becomes regular.
- Drink water, as it helps maintain normal bowel function.
- Stay active according to your condition to keep your bowels functioning normally.

If necessary, use over-the-counter medications from a pharmacy to treat constipation according to the instructions.

What Can Cause Nausea After Surgery?

Nausea or feeling unwell may be caused by pain medication or slowed bowel function. You can relieve these symptoms by supporting normal bowel function, reducing pain medication when your pain allows, and using anti-nausea medication if necessary.

How to Prevent Deep Vein Thrombosis

Joint replacement surgery involves a risk of developing a deep vein thrombosis (blood clot). Blood clots are prevented with medication that your doctor has prescribed specifically for you. The most common preventive treatment is medication injected under the skin. Use your blood clot prevention medication as instructed.

The most important way to prevent deep vein thrombosis is to keep moving. Move several times a day in short sessions.

- Pump your ankles regularly.
- Walk short distances repeatedly.

Seek medical assessment if you develop any of the following symptoms in your leg:

- significant swelling that does not decrease when the leg is elevated
- unusual pain, warmth, or redness
- a feeling of tightness or fullness.

Video: how to administer your blood thinner injection. →



Swelling and Bruising Are a Normal Part of Recovery

After surgery, swelling is common and may continue for several months.

Bruising is also common after surgery and may take a long time to resolve. Medication used to prevent blood clots may increase the likelihood of extensive bruising, which can appear, for example, behind the knee, on the thigh, or on the foot. Bruises may be painful, but they will gradually disappear on their own over time.

Support Your Recovery by Following These Tips:

- Avoid prolonged periods of standing or sitting.
- Keep your leg elevated several times a day.
- Use cold therapy in short sessions several times a day to help reduce swelling and pain.
- Remember that bruising and swelling are normal after surgery and will gradually subside, even though they may feel uncomfortable.

Bruising often develops around the surgical wound and may also spread to a larger area, even down to the ankle and foot, but it will resolve on its own over time.



Take Care of Your Surgical Wound

Monitor the Wound During the First Days at Home

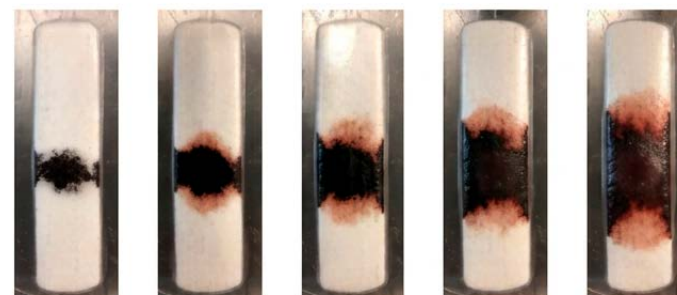
Healing of the surgical wound progresses in stages. It is normal for sensations around the wound to vary and for the skin to react to activity.

Keep the Wound Clean and Protected for Five Days

- Keep the wound protected during the first few days so that it remains clean and can heal undisturbed. This helps reduce the risk of a prosthetic joint infection and prevents bacteria from entering the tissues through the wound.
- Keep the original wound dressing in place for 5 days after surgery. Some drainage may appear on the dressing during the first few days. However, do not change the dressing if it remains securely attached to the skin.
- The amount of drainage will decrease over the following days.
- Change the dressing only if necessary, and always with clean, washed hands to reduce the risk of infection. Do not touch the wound with your hands during the first week.

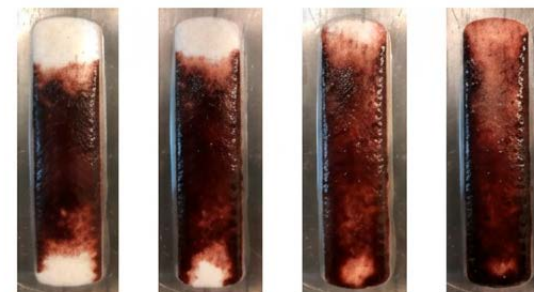
DO NOT CHANGE THE DRESSING

Do not change the dressing if it is securely attached to the skin around the edges.



CHANGE THE DRESSING

Change the dressing and follow the dressing change instructions shown on the next page.



If the wound dressing needs to be changed at home, follow these instructions:

- Do not change the dressing in the bathroom or shower area. Protect the surface by placing, for example, a large towel under your leg to protect a chair, bed, or sofa.
- Wash your hands carefully with soap before changing the dressing. Handle wound dressings and gauze pads only with clean hands.
- Remove the dressing in the direction of the wound while holding the edges of the dressing.
- If the wound is moist, place a new dressing directly over the wound. For a knee wound, apply the dressing with the knee slightly bent.
- Do not wet, disinfect, touch, or wipe the wound when changing the dressing. Do not touch the wound area with bare hands at any stage.
- Check the wound 2 days after changing the dressing.

How Do I Shower?

- You may shower with the dressing applied at the hospital. The dressing is water-proof if it is firmly attached to the skin.
- After 5 days, if the wound is dry, you may remove the dressing and shower without it.

If the Wound Is Draining

- If the wound is still draining after 5 days, keep it covered with a dressing until it is completely dry.
- Contact Coxa Customer Service:
 - if drainage from the wound increases and/or you need to change the dressing more than once a day
 - if the wound is still draining 10 days after surgery

Reduce Wound Protection Once the Wound Is Dry

- Remove the dressing completely after 5 days if the wound is dry.
- However, continue to monitor the wound by checking its colour, temperature, and any drainage.

What You Can Expect

- Redness and mild warmth around the wound are a normal part of healing.
- After exercise, redness and warmth may temporarily increase as blood circulation in the area becomes more active.
- There may be a temperature difference between the operated and non-operated leg for several months. This is normal and is not a sign of infection.

These changes indicate that the tissues are healing and that metabolic activity has increased. They do not mean that something is wrong.

Schedule Staple Removal

The wound staples will be removed 9-14 days after surgery, according to your orthopaedic surgeon's instructions. You can check the date for staple removal in the nursing summary in MyKanta. Schedule an appointment for staple removal as soon as you return home through your local health centre, home nursing service, occupational healthcare provider, or a private healthcare provider.

Staple removal date:

Do Not Use the Sauna Until the Staples Have Been Removed

You may use a sauna only after the staples have been removed, as heat and moisture can slow wound closure and increase the risk of infection. Wait until the staple removal sites have healed. You may use a sauna when at least one day has passed since staple removal, the wound is not draining and the skin around the wound is dry and calm.

Caring for Your Surgical Scar

After surgery, the scar may feel dry and tight. You can influence how the scar heals and how it feels later on.

Start Moisturising Only After the Staples Have Been Removed

- Begin moisturising the scar a few days after staple removal, once the wound is completely closed and dry. A basic moisturising cream is sufficient. Its purpose is to keep the skin soft and flexible.
- Continue moisturising for several months, as scar tissue tends to become drier than the surrounding skin.
- Moisturising helps soften scar tissue, reduce tightness, and relieve itching.
- Once the wound has healed and the skin is intact, you can begin gently massaging the skin around the scar (no earlier than 3 weeks after surgery).
- Massage helps soften scar tissue, improve mobility, and prevent the scar from adhering to deeper tissues.

How to Massage and Care for Your Scar Safely

- Use your fingers or the palm of your hand. Massage gently so that the skin moves in different directions. You can also gently lift the skin with a light pinching motion if it feels comfortable.
- You may massage the scar daily for a few minutes.
- At first, the scar may feel tight or uncomfortable, but you can still move normally.
- Light physical activity helps reduce tightness and discomfort by improving circulation.
- Protect the scar from sunlight for 6-12 months. Scar tissue burns easily, and ultra-violet (UV) radiation can permanently darken the scar.
- For more information about scar care, visit, for example: www.terveyskyla.fi.

Support Is Available After You Return Home

You Will Be Contacted by Coxa

Approximately one week after you are discharged, you will be contacted by Coxa. The purpose of this contact is to ensure that your recovery and rehabilitation have started as planned. If you do not use the CoxaPolku app, the contact will be made by telephone.

During the contact, you can tell us how you are doing and ask any questions you may have or request clarification on the instructions you have received. This follow-up contact is part of a safe care pathway and helps you continue your recovery with greater confidence.

Problems?

Contact Coxa (tel. +358 3 311 715) if you experience any of the following after surgery::

- increasing pain, redness, or warmth
- pus-like wound drainage
- increasing bleeding
- a fever above 38°C lasting for 24 hours.

Do not start antibiotics without an assessment by a Coxa physician.

You can review the key information in the "Recovering at Home After Joint Replacement Surgery" patient education video. You can find the educational videos on Coxa's website at www.coxa.fi or by scanning the QR code below. The patient education videos are subtitled in English. You can turn on the subtitles by selecting the CC button.

Educational videos:



	EVERYTHING IS FINE WHEN:	CALL COXA IF:	SEEK EMERGENCY CARE IF:
PAIN	Pain is relieved by pain medication. Pain after surgery is normal.	Pain in the operated limb becomes unbearable and prevents you from sleeping or moving. Regular pain medication is not sufficient, and you are unable to manage the pain at home.	The instructions and pain medication provided by Coxa are no longer sufficient, and you are unable to manage the pain at home.
SWELLING AND BRUISING	The operated leg is warm and red. Swelling and bruising are normal and may continue for several weeks or months. Swelling decreases overnight. Bruising may occur over large areas.	Swelling increases significantly and does not decrease with rest or overnight.	Your leg is red and tender to the touch. The limb is significantly swollen, unusually painful, warm, tender, firm, or red.
WOUND	There may be drainage on the wound dressing during the first few days. The drainage decreases within a few days.	Drainage onto the wound dressing increases. The dressing needs to be changed more than once a day. The wound is still draining 10 days after surgery.	Drainage from the wound increases significantly or the drainage is pus-like. Your temperature is repeatedly above 38°C.
CONSTIPATION	Your bowel function is normal.	You feel nauseated or have severe abdominal pain. Your bowels are not functioning even with medications that promote bowel function.	
APPETITE	Your appetite is mostly normal. You may occasionally feel nauseous.	Your appetite is poor. You experience occasional vomiting and nausea that prevent you from taking your medications.	You experience repeated vomiting. You are unable to eat or drink. Your general condition is deteriorating.

RECOVERY AND EXERCISE



Start Moving as Soon as Your Condition Allows

Exercise Supports Your Recovery

By exercising, you restore muscle strength in your lower limbs, joint mobility, and tissue flexibility. Osteoarthritis has weakened muscle function and mobility, so restoring them requires regular exercise.

Become familiar with the exercises in this guide before surgery. When the exercises are familiar to you, it is easier to start them after surgery. You can also find the exercises on Coxa's website at www.coxa.fi.

After surgery, you will begin movement exercises under the guidance of a physiotherapist. Exercise supports your rehabilitation as joint replacement surgery alone does not restore physical function or eliminate the pain. Instead, surgery will create conditions for the recovery and exercising regularly will help return to active daily life.

At first, muscle strength may be reduced, especially in the front thigh muscles. Lifting your leg or straightening your knee may feel difficult during the first few weeks. Clicking or popping sensations in the joint replacement are also common during the early stages of recovery.

Start Moving and Progress Gradually

Start moving as soon as your condition allows.

- Initially, walk with the help of an assistive device (crutches or rollator).
- Take several short walks throughout the day.
- Begin indoors and gradually move outdoors.
- Increase walking distances according to your condition and pain level.

An assistive device helps reduce the load on the operated joint and makes moving around safer.

Rest Is Part of Rehabilitation

A balance between activity and rest supports your recovery. Excessive strain may increase pain and swelling.

- Rest in a lying position several times a day.
- Avoid prolonged sitting.
- Keep the operated leg elevated to reduce swelling.
- Use cold therapy for 15-minute sessions several times a day (approximately 4-5 times).

During the Early Stages of Rehabilitation

- Increase activity gradually.
- Listen to your body and adjust your activities according to how you feel.
- Break up long periods of sitting and change position regularly.

Resting positions:

- After knee replacement surgery: Rest on your back or side. If necessary, use a pillow between your knees.
- After hip replacement surgery: Rest on your back or on your non-operated side. Use a pillow between your knees for support.
- You may also try sleeping on your stomach if it feels comfortable.

Remember

Progress at a steady pace and listen to your body. By moving and exercising regularly and making sure you get enough rest, you create the best possible conditions for successful rehabilitation.

Watch the
physiotherapist's
instructional video
here.



Learn Safe Crutch Walking Technique

Walking and Weight Bearing on the Operated Leg

- Use crutches or rollator for support when walking at first. They will help you move around safely during the early stages of rehabilitation.
- You may put your full weight on the operated leg. Practise trusting your leg and building confidence in your mobility.
- When standing, maintain good posture and distribute your weight evenly between both legs.
- Use crutches as needed for 2-4 weeks.
- Gradually Stop Using Crutches
 - first stop using the crutch on the operated side
 - stop using the second crutch when you can walk with good control and without limping
- Avoid strenuous pushing, pulling, or other forceful exertion during the first two months.

Practise Weight Shifting

Slowly shift your weight from one leg to the other while keeping your knees and hips straight. This helps improve balance and confidence when walking.

Crutch Walking

Choose the walking technique that feels most natural for you, either a step-to gait or a reciprocal gait. If both lower limbs have been operated on at the same time, use a reciprocal gait as your primary walking technique.



Step-to gait



Reciprocal gait

Stair Climbing

Use the handrail for support on one side when using stairs. If you need to use stairs during your rehabilitation, your physiotherapist will provide instructions on how to use them safely.



When walking up stairs:

- first step onto the next stair with your non-operated leg
- push up using that leg and then bring the crutches and the operated leg onto the same step

If both sides have been operated on, begin stair climbing by pushing up with the less



When walking down stairs:

- first place the crutches and the operated leg onto the lower step
- then bring the non-operated leg onto the same step while supporting yourself with the crutches.

Knee Mobility Exercises at Home

After knee replacement surgery, you may bend and straighten your knee without restrictions.

- Begin practising knee mobility gradually and aim to achieve full knee extension and as much knee flexion as possible through regular exercise.

Exercise at Home Every Day

1. Exercise regularly 2-3 times a day.
2. Perform mobility and muscle-strengthening exercises with 5-10 repetitions, 1-3 sets at a time. Gradually increase the number of repetitions and sets as swelling decreases and your overall condition allows.
3. Keep stretches moderate, holding them from a few seconds up to about 30 seconds.
4. Progress your exercises gradually to achieve the greatest benefit while minimizing pain caused by overexertion.
5. You may start using a stationary bicycle after the staples have been removed, initially without resistance.



Practise straightening your knee and activating your thigh muscles. Flex your ankles and press the backs of your knees against the bed by tightening your thigh and buttock muscles.



Practise bending your knee. Bend your knee and hip. Straighten your leg back onto the bed. Keep your leg in contact with the bed throughout the movement, allowing it to slide along the surface.



Practise knee extension. Practise straightening your knee by stretching the soft tissues at the back of the knee and activating your thigh muscle. Place a rolled towel under your ankle, relax your leg, and allow the knee to straighten fully. Then tighten your thigh muscle and actively press your knee into a straight position.



Practise bending your knee. Bend and straighten your knee by sliding your foot along the floor. Finally, bend your knee as far as possible and hold the stretch (for up to 30 seconds).

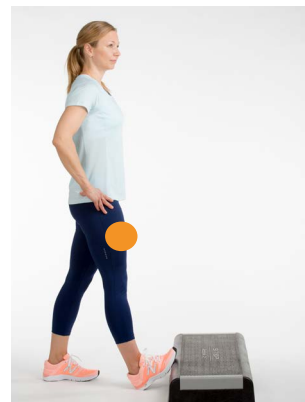


Practise straightening your knee and strengthening your thigh muscle. Flex your ankle, tighten your thigh muscle, and straighten your knee fully.

Practise These Exercises 2 Weeks After Surgery



Practise full knee extension and strengthen the inner part of your thigh muscle. Place a roll under your knee, flex your ankle, and straighten your knee. Tighten your thigh muscle and press the back of your knee against the roll.



Stretch your calf muscle. Place the ball of your foot against a wall or step, keep your knee straight, and move your hips forward to stretch your calf.



Improve knee flexion. Place your operated leg on a step. Bend your knee and shift your weight forward, then return to the starting position. Finally, bend your knee as far as possible and hold the stretch.



Stretch your hamstring muscle. Place your operated leg on a step, straighten your knee, and lean your upper body forward to stretch the back of your thigh.

Hip Mobility Exercises at Home

Follow These Instructions for 2 Months After Hip Replacement Surgery

- When resting on your non-operated side, place a pillow between your knees to improve your position.
- Avoid excessive bending forward. When bending down or sitting on a low seat, for example when putting on socks, turn the operated leg outward (knee pointing outward). Do the same when pushing yourself up.
- Use seat risers and assistive devices as needed, especially during the early stages of recovery.
- Avoid physically strenuous activities.
- Use crutches for approximately 2-4 weeks. Gradually stop using them, one crutch at a time, starting with the crutch on the operated side, once your walking is controlled and smooth.



When bending forward while standing, slide the operated leg backwards.

Use assistive dressing devices as needed when getting dressed.

Exercise at Home Every Day

1. Exercise regularly 2–3 times a day.
2. Perform mobility and muscle-strengthening exercises with 5–10 repetitions, 1–3 sets at a time. Gradually increase the number of repetitions and sets as swelling decreases and your overall condition allows.
3. Keep stretches moderate, holding them from a few seconds up to about 30 seconds.
4. Progress your exercises gradually to achieve the greatest possible benefit while minimizing pain caused by overexertion.
5. You may start using a stationary bicycle approximately 4 weeks after surgery, initially without resistance.



Practise hip extension and activate your thigh and buttock muscles. Flex your ankles and press the backs of your knees towards the bed by tightening your thigh and buttock muscles. Focus on performing the exercise slowly and with control.



Practise hip flexion and extension. Bend your knee and hip, then straighten your leg back onto the bed. Keep your leg in contact with the bed and slide it along the surface throughout the movement.



Practise straightening the operated leg. Bend your non-operated leg and press the operated leg straight against the bed.



Practise hip external rotation. Bend both legs and bring the soles of your feet close together. Open your hips by moving your knees outward, allowing your hips to rotate outward. Stretch gently and return to the starting position. If necessary, you may assist the movement with your hands.



Stretch your inner thigh muscles and improve hip mobility. Sit with your knees bent and the soles of your feet close together. Open your hips by moving your knees outward and assist the movement with your hands.

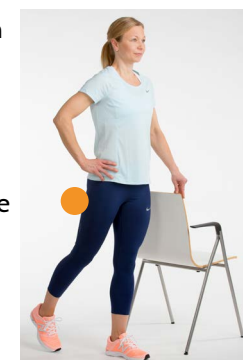


Increase the stretch from the previous exercise by leaning your upper body forward. Sit with your knees bent and the soles of your feet close together. Open your hips by moving your knees outward and assist the movement with your hands. At first, bend forward only through a comfortable range of motion towards the floor.

Practise These Exercises 2 Weeks After Surgery



Practise hip flexion while standing. Stand and hold on to a chair for support. Slowly and with control, lift the operated leg up in front of your body into hip flexion.



Practise hip extension and activate your buttock muscles. Move the operated leg straight backwards and tighten your buttock muscles. Move slowly and with control.

You can also perform this exercise with the operated leg as the supporting leg. As your recovery progresses, continue the exercise by gradually combining the hip flexion and extension movements into a single movement.

Knee and Hip Mobility Exercises 4 Weeks After Surgery



Stretch your hip flexor muscles. Stand and hold on to a chair for support. Keep the operated leg extended behind your body, gently move your pelvis forward, and stretch your hip flexor muscles.



Strengthen your calf muscles and improve ankle control. Stand and, if necessary, hold on to a chair for support. Rise onto your toes, turn your heels slightly towards each other, and then slowly lower them back to the floor with control.



Practise hip extension and strengthen your buttock muscles while lying on your back. Lie on your back with your knees bent. Tighten your buttock muscles and lift your pelvis off the bed. Make sure your weight remains on your heels and avoid arching your back during the movement.



Strengthen your thigh muscles and practise squatting with control. Stand with your feet shoulder-width apart and distribute your weight evenly between both legs. If needed, hold on to a piece of furniture for support. Perform a shallow squat by bending your knees and hips, then slowly return to a standing position.



Strengthen your thigh muscles and practise standing up using a chair. Stand in front of a chair with your feet shoulder-width apart. Lower yourself into a squat close to the chair and then return to a standing position. In the early stages, you may make the movement easier by supporting yourself with your thighs or the armrests of the chair.

**FIND MORE EXERCISES ON OUR WEBSITE AT
WWW.COXA.FI**

Return to Your Physical Activities Gradually

Stay Active and Progress Step by Step

Stay physically active every day during your recovery. Walk, perform the exercises in this guide, and gradually return to your normal daily activities. Pain related to physical exertion is still a normal part of rehabilitation. If needed, use cold therapy and pain medication to help you stay active and support your recovery as smoothly as possible.

Remember that good physical fitness and muscle strength support your recovery after surgery. The goals of physical activity are to improve:

- overall fitness
- muscle strength
- joint mobility
- balance
- muscle flexibility.

Gradually increase the intensity of your physical activity and exercise. If your pain increases significantly during or after exercise, reduce the level of activity. Pain medication can help you remain active.

Recovery After Joint Replacement Surgery Is Gradual and Takes Time

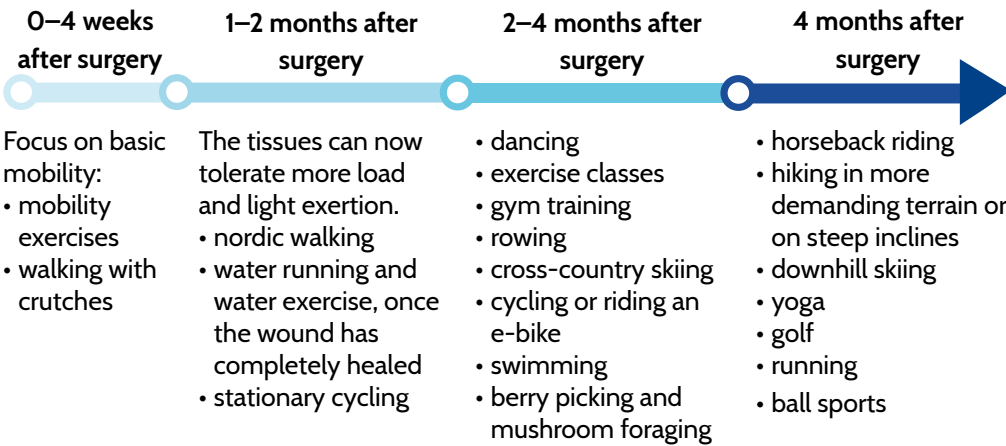
Your full recovery may take as long as 1-2 years. Recovery time is influenced by factors such as your general health, muscle strength, joint mobility, and psychological and life circumstances. For this reason, it is not worthwhile comparing your recovery or surgical outcome with those of others.

The deepest soft tissues usually heal within 4-8 weeks, although healing may take longer for some people. Improvement in muscle strength and endurance takes time, ranging from several months to a year. With cementless joint replacement components, fixation to the bone and strengthening of the surrounding bone occur gradually during the first weeks and months after surgery. In addition, the recovery of proprioception, movement awareness, and balance to their preoperative level takes at least four months and continues to improve with ongoing exercise.

For these reasons, impact activities and other physically demanding forms of exercise are not recommended during the first four months after surgery.

Returning to Exercise and Sports After Surgery

When returning to exercise and sports, take into account the stages of healing and your body's recovery described above. The timeline shown on the following page is intended as a guide. Individual recovery and progression may differ from it.



Follow-Up and Physiotherapy Guidance

Arrange a physiotherapy guidance appointment yourself as soon as possible after returning home:

- through your local health centre
- through occupational healthcare, or
- with a private physiotherapist.

In accordance with your orthopaedic surgeon's recommendation, the physiotherapy guidance appointment is usually scheduled 4 weeks after surgery in your home municipality. The purpose of the appointment is to monitor and support your rehabilitation. During the appointment, the physiotherapist will assess how your exercises and mobility are progressing and ensure that your rehabilitation is moving in the desired direction. If needed, you will receive individual exercise instructions to support your recovery.

Follow-Up Appointment

After knee replacement surgery, follow-up is carried out through a telephone call from a physiotherapist 3-4 months after surgery. After hip replacement surgery, a routine follow-up appointment is not required. If you experience problems with your recovery or difficulties with rehabilitation, we can arrange either a follow-up and guidance appointment with a Coxa physiotherapist or with an orthopaedic surgeon.

Long-Term Follow-Up of Your Joint Replacement

Coxa is responsible for the long-term follow-up of its patients. You will be asked to complete a symptom questionnaire one year and five years after surgery. Your first X-ray examination will take place 15 years after surgery, and thereafter every five years. In addition to the imaging examinations, you will be asked to complete symptom questionnaires. You will receive more detailed instructions when follow-up of your joint replacement becomes due.

Info

**GOOD TO
KNOW**

Tekonivelsairaala
COXA



Frequently Asked Questions

Do I Need to Attend the X-ray Appointment Mentioned in My Appointment Letter?

Yes, if your appointment letter includes instructions to attend an X-ray examination.

When Can I Receive Vaccinations Before or After Surgery?

For example, influenza and COVID-19 vaccines are recommended at least two weeks before surgery or two weeks after surgery. However, joint replacement surgery will not be cancelled or postponed if less time has passed since vaccination.

Does a Joint Replacement Affect My Sex Life?

No. Friction on the wound area should be avoided while the wound is healing. After hip or shoulder replacement surgery, any movement restrictions should be taken into account.

When Can I Return to Work?

Returning to work will be discussed with your surgeon before surgery. You will receive your sick leave certificate from the ward when you are discharged. Joint replacement surgery is not a barrier to returning to work. The length of sick leave is individual and depends on the nature of your work. At Coxa, a sick leave certificate is issued for four weeks. Any extension of sick leave is determined by your occupational healthcare provider or local health centre physician.

When Can I Travel in a Car or Drive a Car?

You may travel in a car as usual. You may drive when you have sufficient control of your lower limb. Also consider the possible effects of your medication on your ability to drive. After hip replacement surgery, take any movement restrictions into account.

How Can I Prevent a Prosthetic Joint Infection?

Maintaining your general health, preventing infections, and ensuring prompt treatment of infections remain important. Infections can spread through the bloodstream to the joint replacement.

Treatment of persistent skin conditions and good oral and dental health are important after joint replacement surgery. If you are scheduled for dental treatment, an outpatient endoscopic procedure, or another medical procedure, tell the treating physician that you have a joint replacement.

Why Do My Legs Feel Different Lengths?

During planning before hip replacement surgery, every effort is made to equalize any difference in leg length. To maximize joint stability, the length of the operated leg may change slightly. In general, a leg length difference of less than 1 cm does not require treatment. After knee replacement surgery, leg length cannot be significantly altered.

Why Is the Surgical Area Numb?

Sensation gradually returns to the surgical area. However, small numb areas around the scar may remain permanently.

When Can I Restart Omega-3 Supplements After Surgery?

You may restart omega-3 supplements once the blood thinner prescribed by the hospital has been completed. If you use a blood thinner as part of your regular medication, you may restart omega-3 supplements four weeks after surgery.

Can I Use an Infrared Sauna?

You may use an infrared sauna after the wound has healed, taking your own comfort into consideration. Infrared rays do not penetrate deeply enough into the tissues to create restrictions after joint replacement surgery.

What Should I Consider When Flying?

If there are any issues during security screening, inform the security officer that you have a joint replacement. You do not need a certificate for security screening. Informing the security officer about your joint replacement is sufficient.

Do I Need Preventive Antibiotics If I Need Dental Treatment After Surgery?

You need preventive antibiotic treatment as a single dose one hour before dental procedures that may cause bleeding (for example, root canal treatment or tooth extraction) if:

- your joint replacement surgery was performed less than 6 months ago
- you have more than one joint replacement
- you have undergone revision joint replacement surgery
- you have conditions that increase the risk of infection, such as rheumatoid arthritis, SLE, another disease that weakens the immune system, or you are using medications that suppress the immune system

Always tell your dentist that you have a joint replacement. Your dentist will assess the need for antibiotics in situations other than those listed above.

Things to Keep in Mind During Your Hospital Stay

Coxa Is a Smoke-Free and Fragrance-Free Hospital

Coxa is a smoke-free hospital. Smoking is allowed only in designated outdoor areas and, even there, only in exceptional circumstances. Do not smoke during your hospital stay. If needed, bring nicotine replacement products for your time in the hospital.

Please also note that Coxa is a fragrance-free hospital. Do not use perfumes or scented products in the hospital, so that everyone can enjoy a safe and comfortable environment.

Welcome Visitors Safely and Maintain Good Hand Hygiene

If you stay overnight in the hospital, your loved ones may visit the ward freely during daytime hours. Night-time is reserved for rest. Preventing infections is an essential part of your care. Therefore, it is important that both you and your visitors follow good hand hygiene and visitor guidelines:

- Always wash your hands before entering and when leaving the ward. Use hand sanitizer.
- Visitors may come to Coxa only if they are healthy. Visitors must not have any symptoms of a respiratory infection, even mild symptoms such as a runny nose
- Ask the nursing staff before bringing flowers or food to a patient. Flowers may not be brought into a patient room if any patient in the room is allergic to them. Food may be restricted because of a medical condition or special diet.
- Pets are not allowed inside Coxa. Only assistance dogs and guide dogs are permitted to accompany their handlers in the hospital.

Find Out Whether You Are Eligible for Travel Reimbursement

You may be entitled to reimbursement from Kela for travel costs related to your treatment, according to the principle of the nearest treatment location. This usually means the treatment facility located closest to your permanent home address. If you choose a specialist care provider in another cooperation area under Finland's freedom of choice legislation, you will be reimbursed no more than the cost of travel to the university hospital serving your own wellbeing services county.

Before surgery, check directly on Kela's website whether you are eligible for travel reimbursement and on what grounds. Kela makes all decisions regarding travel reimbursement. If necessary, additional information is available from Kela Customer Service.

Do You Need Accommodation in Connection with Your Treatment?

You can stay at Norlandia Tampere Hotel. If you are travelling from more than 150 kilometres away, Coxa will arrange the hotel accommodation included in your treatment process when your appointments are scheduled.

The hotel stay includes lunch, dinner, and an evening snack. Your loved one may also stay with you for an additional charge.

You may also book additional nights at your own expense at a discounted rate. To book self-paid accommodation, contact Norlandia Tampere Hotel directly by phone at 050 384 4400 or by email at tampere@norlandia.com. When making your reservation, mention that you are a Coxa patient or a patient's family member.

Hotel Information

Address: Biokatu 14, FI-33520 Tampere

Rooms: 130

Parking: Heated parking garage and outdoor parking

Services: Sauna facilities, meeting services, lobby café open 24/7, lunch buffet, à la carte restaurant, self-service laundry, and free Wi-Fi in rooms

Purchase Your Medications Conveniently Before Going Home

You can purchase the medications you need at Tammedica Pharmacy, located in the main lobby of Tays, Building D.

Tammedica Pharmacy can deliver your prescribed medications directly to the Coxa ward before you return home, making discharge easier. Alternatively, you can collect your medications on your journey home from the pickup point in the Tays parking garage.

Order your medications by calling the pharmacy: 010 336 6140.

Please have your Kela card with you when ordering medications. The ordering and delivery fee is paid by bank card when the medications are delivered.

For more information, visit: www.tammedica.fi

Statements and Social Work

Coxa provides medical statements related to joint replacement surgery. For other types of medical statements, please contact your local wellbeing services county physician or occupational healthcare physician. Please note that the criteria for a disabled parking permit are generally not met on the basis of joint replacement surgery alone.

Because of the short length of stay, appointments with a social worker at Coxa are available only in special circumstances. Matters related to social services should primarily be handled with the social worker in your home municipality.

If necessary, you can contact a social worker from the Pirkanmaa Wellbeing Services County as early as your assessment appointment at Coxa, for example if you have questions about managing at home after surgery or concerns about your financial situation.

If you experience problems related to your care or treatment, you can contact the Patient Ombudsperson. The Patient Ombudsperson provides advice on patients' rights and offers support in problem situations. Patient Ombudsperson: Tel. 040 190 9346

Data Protection and Patients' Rights

At Coxa, your personal data is handled carefully and appropriately at every stage of your care. The processing, storage, archiving, and disposal of personal data are governed by legislation. You have the right to:

- know what personal data is being processed and on what basis
- access your own data
- request correction of inaccurate information
- request restriction of processing until the information has been verified or corrected

For more information, visit www.coxa.fi under Patients at Coxa / Data Protection and Patients' Rights.

Give Feedback About Your Care

You can help us develop Coxa's services. We encourage you to provide feedback about the care and services you receive, preferably directly to our staff. After your outpatient appointment and again one week after surgery, you will receive a feedback survey by text message, where you can share your experience of care. You can also submit feedback electronically at: www.coxa.fi/palaute.

Notes

Karttamerkinnot

-  Tays Päivystys Acuta
-  Esteetön pysäköinti
-  Asiakaspysäköinti
-  Bussipysäkki
-  Ratikkapysäkki
-  Rakennustunnus
-  Infopiste
-  Taksitolppa

How to Get to Coxa

If you are arriving at Coxa by car, we recommend using the Tays Parking Garage or Riviparkki, both of which are located close to Coxa. There are also a few short-term parking spaces in front of Coxa for drop-off and pick-up traffic.

You can also reach Coxa easily by bus or tram. Get off at the Tampere University Hospital (Tays) stop. All buses and trams travelling to Tays are clearly marked with Tays, making it easy to choose the correct route.



Pysäköintialueet

- 1** Tays parkkihalli
- 2** Tays T-parkkihalli
- 3** Ensiparkki
- 4** Riviparkki
- 5** P-Kauppi, Finnpark
- 6** P-Finnmedi 1, Finnpark
- 7** P-Finnmedi, Europark

Saattoalueet

- S0** Tays parkkihalli
- S1** Elämänaukio
- S2** Säteenaukio
- S3** Radius yläpiha
- S4** T-rakennus
- S5** Coxa

Coxa Hospital for Joint Replacement

Customer service

03 311 715

Niveltie 4,
33520 TAMPERE

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