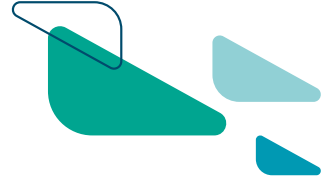




PÔLE I3LM (Inflammation, Infection, Immunology, Locomotor)

Department of Orthopaedic, Traumatological and Reconstructive Surgery

Pr Pierre Mansat, Department Coordinator



My knee prosthesis



Hôpital Pierre-Paul Riquet

Place du Dr Baylac

TSA 40031

31059 Toulouse Cedex 9



My knee prosthesis

Sommaire

I'm going to have knee replacement surgery.....	3
Useful telephone numbers	3
My stay at Pierre-Paul Riquet Hospital.....	5
General advice with hospitalization.....	6
Organization of the pre-hospitalization care pathway	7
Orthense: keeping in constant touch with your surgeon	8
MAX: to prepare for your anaesthesia consultation.....	10
The course of your hospitalization.....	11
My current treatments	12
Hygiene rules to be observed	13
The day of your surgery.....	14
The operating room	14
Implants	16
Possible complications	17
Post-operative care and rehabilitation.....	17
FAQ - Frequently asked questions	20
Not to be missed	23

I'm going to have knee replacement surgery

The purpose of this booklet is to help you prepare for surgery and optimize the post-operative period, so that you can regain your independence as quickly as possible.

Surgery is a crucial stage in your care. Preparing for surgery, rehabilitation and regaining functional autonomy are just as important.

Some elements of this document apply to everyone, while others depend more on your particular situation.

Our team is on hand to help you every step of the way. Please find below our contact details.

Useful telephone numbers

-
- **Appointment booking platform:** 05 61 77 55 54
 - **Hospitalization scheduling nurse:** 05 61 77 22 68
 - **Emergency or medical question - Intern on call:** 05 61 77 56 19
 - **Nurse via trajectoire (rehabilitation center management) :** 05 61 77 23 68
-



P3 BIS

CONSEILLÉ POUR LES BÂTIMENTS :
 - PIERRE-PAUL RIQUET (3^E ÉTAGE)
 - CLINIQUE DE L'ADOLESCENCE
 - SUPEA
 - PODOLOGIE
 - SÉNAC / TURIAT

ACCÈS VÉHICULES PAR PLACE BAYLAC

P3

CONSEILLÉ POUR LES BÂTIMENTS :
 - PIERRE-PAUL RIQUET (3^E ÉTAGE)
 - ALBARÈDE
 - LAPORTE
 - RAYMONDE FOURNET
 - URM (3^E ÉTAGE)

ACCÈS VÉHICULES PAR AV. JEAN DAUSSET

P1

CONSEILLÉ POUR LES BÂTIMENTS :
 - HÔPITAL PAULE DE VIGUIER
 - HÔPITAL DE PSYCHIATRIE
 - URM (1^{ER} ET 2^E ÉTAGES)
 - PIERRE-PAUL RIQUET

P2

CONSEILLÉ POUR LES BÂTIMENTS :
 - PIERRE-PAUL RIQUET
 - HÔPITAL DES ENFANTS

LÉGENDE

- BÂTIMENTS ACCUEILLANT DU PUBLIC
- PARKINGS USAGERS P1, P2, P3, P3 BIS
- STATIONNEMENT PMR
- DÉPÔSE-MINUTE URGENCES ET PATIENTS
- NAVETTE INTERNE
- LOCAL INFO PARKING
- SENS DE CIRCULATION
- TRAM LIGNE T1 / T2
- LOCAL INFO PARKING

My stay at Pierre-Paul Riquet Hospital

You'll find all the information you need to ensure your stay runs smoothly in the Ambulatory Passport, with the link below:

https://www.chu-toulouse.fr/IMG/pdf/403325_livret_ambulatoire_ppr.pdf

You can visualize the places where you have to go by watching a slide show about the patient path, with the link: <https://www.chu-toulouse.fr/-reconstruction-du-ligament-croise-anterieur-du-#art7893>

Transportation: how do I get to the hospital?

Arrival by tramway:

- Access lobby **Hall D**
- Take the elevators on your right
- Climb to the 3rd level
- Follow the long glass corridor to **Hall A** (green color)
- Take the elevators on your left
- Go up to the **reception area on the 4th or 5th floor**, depending on the information given to you at the time of preparation.

Arrival by car:

Entrance required at Place Baylac

- Follow the signs to Parking P3 bis
- Parking in parking lot P3 bis

Payment: 1st hour free, then €1.80 per stay.



A patient badge will be given to you when you leave the department to enable you to benefit from this rate.

For people with reduced mobility, temporary parking is available at the drop-off point. Payment: 30 min. free, then €1 every 10 min.

General advice before hospitalization



Physical activity

Regular exercise is essential. It's all about stretching and strengthening muscles to make it easier to resume walking after surgery. This is done according to your capabilities and pain level. A daily walk will help you get ready. If you're more athletic, keep up a regular pace according to your pain level.



Losing weight

If you are overweight, your doctor may recommend that you lose a few kilos before knee replacement surgery. Being overweight can lead to further deterioration of your knee. You may benefit from appropriate management. Obesity is a risk factor for complications. Weight loss can help reduce the risk of post-surgical complications such as infection.



Stop smoking

Nicotine consumption affects blood flow and can slow down your recovery, leading to complications. Smoking increases the risk of delayed healing, infection and deep vein thrombosis. Your surgeon or general practitioner can advise you on how to stop smoking. He or she can also refer you to a healthcare professional..



Alcohol

Excessive alcohol consumption considerably increases the risk of post-operative complications such as massive bleeding and infection. Regular alcohol consumption has a negative impact on immune response.

Organization of the pre-hospitalization care pathway

Blood test D – 15 before anesthesia consultation

Checks your hemoglobin level, the main coagulation factors and eliminates any infection.
To be carried out in a laboratory near you. Fax results to 05 61 77 92 47.

Anesthesia consultation

You have had a blood test prescribed by your surgeon to check for anemia or iron deficiency.
Depending on the results, an infusion of iron and/or EOP may be necessary. This 30-minute infusion will be performed immediately after your anesthesia consultation.

Nasal swab D-21 before surgery

Swab test.
If negative: do nothing
If positive: apply cream to nose as prescribed by doctor

Radiographic evaluation

Carry out radiographic examinations according to medical prescription.
EOS-type radiographic assessment of the lower limbs.
This assessment is used to plan the operation.

Hospitalization D-1 before surgery


You will be welcomed at the Pierre-Paul Riquet Hospital the day before surgery. The scheduling department will have informed you of your pick-up point.
Hall A (green sign), 4^e or 5^e floor

Discharge

- Return home, rehabilitation center, PRADO
- Request work stoppage or extension as soon as possible

▲ Orthense: keeping in constant touch with your surgeon

Thanks to tailored, personalized support using  ORTHENSE

 ORTHENSE is a medical application that will accompany you throughout your stay, from the pre-operative phase to post-op. It provides personalized support to help you resume your daily activities.

This site can be accessed via a variety of devices (smartphone, tablet, computer). By answering several questionnaires sent by your surgeon on key dates, the application will answer your questions and assess your progress.

It can be consulted by the surgeon, who will have real-time access to your results and progress. In the event of an unfavorable evolution, the surgeon will be directly informed and will be able to communicate with you via the application.



ORTHOPEDIC FOLLOW-UP CONNECTED TO YOUR SURGEON

ORTHENSE



Your surgeon and his medical team offer you a digital follow-up system that extends their discourse and increases their ability to monitor your state of health.

Dedicated to you, it will accompany you in **your preparation and during your recovery**, making it easier for you to resume your daily activities.

A simple e-mail

An e-mail will invite you to validate your account. Use your login and password to access <https://suivi.orthense.com>. Your participation improves the outcome of your treatment, and is part of ongoing medical progress.

If you have a question, send an e-mail to contact@orthense.com

A splint at home

Thanks to your surgeon's follow-up, you can receive your splint at home, with no advance payment (tiers-payant).

- Time-saving assurance of the right product

It couldn't be simpler:

- An e-mail will be sent to you to confirm your choice.
- Enter your contact details
- Wait patiently for your brace to be delivered

www.orthense.com for more information on our product
www.digikare.com for more information on our company

Image par laTou de Toboy

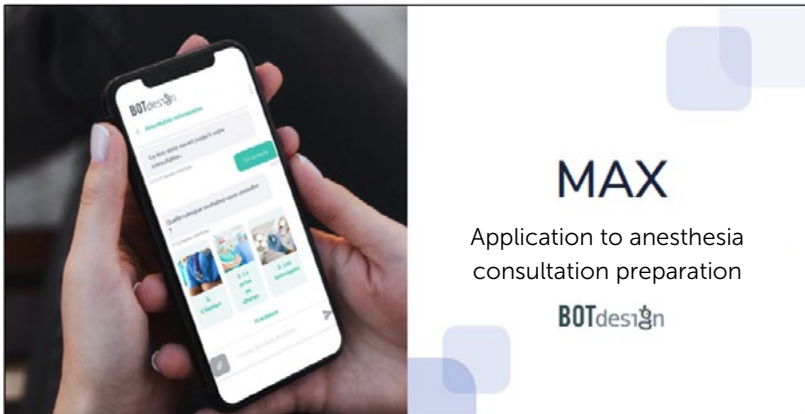
▲ MAX: preparing for your anesthesia consultation

The anesthesia team at Toulouse University Hospital has developed MAX Anesthesia, a digital solution to help you prepare for your anesthesia consultation «MAX Anesthesia».

As soon as the operation is scheduled, logging on to this medical application gives you access to comprehensive documentation on anesthesia, including videos and frequently asked questions. This documentation will help you to better understand and familiarize yourself with your care. You will also be asked to complete a detailed medical questionnaire. This is a mandatory step in preparing for your anesthesia consultation.

The link to the application will be made via the ORTHENSE software.

If you have any questions or problems, please contact our support team at support@botdesign.net.



The course of your hospitalization



My current treatments

You may currently be taking one or more treatments. Some of these may need to be temporarily stopped or adapted. You should inform the anesthesia team of all current treatments, including homeopathic or herbal ones. This is to avoid possible drug interactions.

Some drugs are more risky, including:

- **aspirin, NSAIDs** (e.g. Advil, Ibuprofen, Ketoprofen...) and other drugs that make blood clotting more difficult;
- **corticosteroids and other drugs** that lower the immune system and may therefore increase the risk of post-surgical infection;
- **anticoagulants** (Previscan, Coumadine, Xarelto, Arixtra...).

As part of anaemia prevention, anaesthetists may prescribe **an iron perfusion**, depending on the pre-operative check-up. This perfusion requires 2 hours' care, after the anaesthetic consultation..

Patients with diabetes or heart disease may be asked to consult their specialist before surgery.

Patients who report an illness (e.g. cold, flu, fever, herpes outbreak) in the days leading up to surgery should report it to their doctor.

Hygiene rules to be observed

Good personal hygiene helps prevent the risk of infection during your operation.

Depilate the area to be operated on using clippers only. If you don't have clippers, the hair will be removed in hospital.

Razors should not be used.

Remove all jewelry (earrings, wedding rings, etc.) **and piercings** left at home; remove **nail polish** (hands and feet) and **make-up**.

At home, you should:

- **shower** with liquid soap and **shampoo**, use a washcloth and clean terry towels;
- put on clean pyjamas and sleep on clean sheets;
- brush your teeth thoroughly.

Do not bring valuables or money with you, as the hospital accepts no responsibility for them.

You are responsible for all your belongings in your room.

The day of your surgery

Shower and shampoo again. Remove all jewelry, piercings, contacts, glasses, hearing aids and dentures. Brush your teeth thoroughly.

Do not eat, drink or smoke (including electronic cigarettes, chewing gum or candy), as recommended by your anaesthetist.

Before leaving for the operating room, the nursing team will check that this cleansing has been carried out correctly.

Report any skin lesions.

The operating room

Anesthesia

Anesthesia is a set of techniques that enables a surgical procedure to be carried out by eliminating or reducing pain during and after the operation, under optimum safety conditions.

There are 2 main types of anesthesia: **general anesthesia** and **locoregional anesthesia**. General anesthesia is a state comparable to sleep. With locoregional anesthesia, only a part of the body on which the operation will be performed is put to sleep. General anesthesia may be combined with locoregional anesthesia, either as a matter of principle, or if locoregional anesthesia is insufficient or fails.

All anesthesia requires a **consultation with an anesthesiologist**. During this consultation, you will be informed of the different techniques available for your specific case.

The choice of anesthesia will depend on the surgical procedure and your state of health. The doctor who performs the anesthesia will not necessarily be the one you saw during your consultation.

Any medical procedure, even when carried out with the utmost skill and in accordance with the latest scientific findings, involves a risk. Today's anaesthesia and recovery monitoring procedures enable us to detect and treat abnormalities at an early stage.

The main risks associated with general anesthesia are nausea and vomiting, sore throat (due to the insertion of a tube into the trachea), dental trauma and impaired concentration, which may occur in the hours following anesthesia. Life-threatening complications are extremely rare. There are risks specific to locoregional anesthesia: after spinal anesthesia, difficulty in urinating may necessitate the use of a urinary catheter. Headaches may also occur, sometimes requiring specific treatment.

Locoregional anesthesia can give rise to potentially serious complications (temporary or permanent numbness, cardiovascular accident, convulsions), but these are extremely rare with current techniques.

In all cases, we will choose the most appropriate anesthetic strategy for your operation.

The surgery

The approach used to access the knee joint is located on the anterior part of the knee.

This approach enables the surgeon to reach the knee joint. The surgeon can then cut away the femur and tibia damaged by osteoarthritis.

When everything is ready, the surgeon can place the implants that make up the knee prosthesis. Once positioned, the surgeon will close the various planes of the approach.

The skin will be closed with staples. These will be removed in 15 days by a nurse.

The implants

The choice of implants is made by the surgeon and may vary from case to case to obtain an optimal result.

The knee prosthesis is generally composed of a femoral and a tibial part. Between these two parts lies a third: polyethylene. It enables articulation between the femoral and tibial parts. If necessary, a piece of polyethylene can be fitted over the patella.



Immediate post-operative care

You will wake up in the operating room recovery room. When you're fully awake, you'll be taken back to your room.

The surgeon will then come and explain the details of the procedure.

▲ The possible complications

They are rare, but you should be aware of them:

- a **hematoma** (collection of blood) may form in the knee;
- **infection** of the joint may occur, requiring washing in the operating room and antibiotics;
- **phlebitis** can be caused by the formation of a venous clot. It can be complicated by a pulmonary embolism. Treatment to prevent this will be prescribed;
- knee joint **stiffness** may occur. It may be accentuated by poorly conducted rehabilitation;
- **algodystrophy** is an unpredictable complication. It manifests itself mainly as pain, evolves slowly, but always heals.

Below is a non-exhaustive list of **the main symptoms that should alert you and lead you to contact us and/or seek emergency advice on 05 61 77 56 19:**

- **"unusual" knee or calf pain** not relieved by medication;
- **fever**, sometimes accompanied by chills and sweating;
- **a scarring problem**, often detected by your nurse: delayed healing, persistent bleeding, discharge, inflammation.

▲ Post-operative care and rehabilitation

Nursing care

They will be carried out at your home by a nurse of your choice, and consist of a new dressing every 5 days until the wound is completely healed.

Remember to choose and contact a nurse before the operation, to schedule visits to your home as soon as you return.

Rehabilitation protocol

A detailed rehabilitation protocol for your physiotherapist is provided. We advise you to make an appointment with your physiotherapist as soon as possible, in order to begin pre-operative rehabilitation and to schedule post-operative sessions.

Unless otherwise advised by your surgeon, **here are the main key dates for your rehabilitation:**

- resumption of weight-bearing and walking: the day after surgery;
- drainage of the knee, locking of the quadriceps muscle, gradual recovery of flexion, achievement of full knee extension: up to the end of the first month;
- crutches should be used until you are able to walk properly again, your physiotherapist will help you at this stage;
- resumption of gentle activities of daily living: at 1 month ;
- resumption of all activities of daily living: 3 months.

Cold splint

The use of a cryotherapy splint is particularly recommended in the immediate post-operative period. By activating your Orthense account, you will receive a cryotherapy splint directly at home.

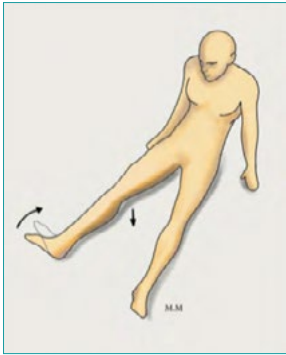
Self-rehabilitation protocol

Between sessions with your physiotherapist, and unless your surgeon advises otherwise, we suggest you do a few simple exercises, a few minutes a day, to optimize your recovery. Remember to ice your knee thoroughly after exercise and physiotherapy sessions.

If you have any problems during exercise, stop it immediately to rest, ice your knee and speak to your rehabilitation specialist or surgeon.

For the first week, limit your movements and activities to the strict minimum to reduce the risk of bleeding into your joint.

Exercises on a bed:



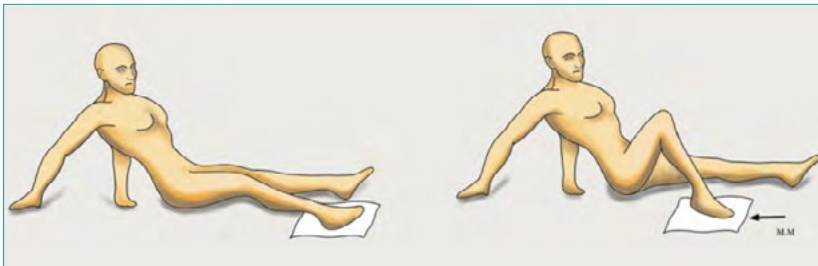
Contract the quadriceps (thigh muscle) for 10 seconds to "crush the back of the knee to the surface of the bed. release: this allows recovery of full knee extension.

Repeat 10 times, 2 times a day

Gradually slide the heel towards the buttock on the surface of the bed, using a cloth under the heel if necessary: this allows the knee to gradually recover its flexion. Bend without forcing.

Once the knee is bent, contract the thigh muscles (quadriceps and hamstrings) for 10 seconds: this helps awaken and strengthen the muscles. Release and gradually extend the leg.

Repeat 5 times, 2 times a day.



Your physiotherapist will be able to provide you with additional exercises throughout your rehabilitation programme.

FAQ - Frequently asked questions

How long after surgery can I drive again?

Driving can generally be resumed two months after surgery.

How long before I'll be able to walk again?

Resumption of full weight-bearing after knee prosthesis is usually possible the day after surgery.

Where should I send my pre-operative tests before my anaesthetic consultation?

Your laboratory must e-mail the results to the anesthesia consultation department at the following address: csanesthppr.accueil@chu-toulouse.fr.

Is transportation to and from the hospital covered by social security?

How do I organize it?

For all hospitalizations in the orthopedic surgery and traumatology department, transport to and from the hospital is covered by social security.

For the return journey after surgery, hospital-home or hospital-rehabilitation center transport will be organized by the hospital.

For journeys of more than 150 km, a request for prior agreement for transport must be made to the social security office 15 days before hospitalization.

The medical transport prescription and transport prior agreement form must be requested from your surgeon's secretariat before hospitalization. This form is to be sent by the patient to the social security office.

Where can I safely store my belongings?

Each room is equipped with a digital locker. The code can be personalized by the patient, enabling them to keep their belongings secure.

Is it possible to have an extra bed?

Only under-age patients may be accompanied, as well as adult patients with a mental handicap requiring permanent accompaniment. The cost per night for the accompanying person is €10, including breakfast, and €5.80 for lunch and dinner.

Can I have a single room?

The room alone is subject to the organization of the department's activities.

How can my relatives find out about me?

When you arrive, ask the ward team for the telephone number.

What are the visiting hours?

Visits are permitted every day from 12pm to 8pm.

During epidemics, visits are prohibited except in special cases.

If you are allowed to visit, please show your health pass.

How do I know what time I'll be in?

The day before the operation, the nurse on duty or the surgeon will inform you of the time at which you will be operated on.

Who takes care of my administrative discharge?

The department receptionist.

What documents will I receive on the day of my discharge?

- Situation report;
- Hospitalization report;
- Prescriptions ;
- Work stoppage or prolongation;
- Consultation and/or post-operative follow-up appointments;
- Traceability of implantable medical devices (implanted device references, etc.).

Nb: If you wish to recover radiographic examinations carried out during your hospitalization, you must make a request to the receptionist or the nurses on duty before your discharge. Requests made after discharge should be addressed to the Patient File Access Service by e-mail sadp@chu-toulouse.fr or by telephone: 05 61 77 24 60.

What follow-up is provided after my procedure?

When you leave the hospital, you'll be given the date of your post-operative consultation appointment (around D+90). You are also in constant contact with your surgeon via the Orthense website.

Is it possible to request a rehabilitation center after hospitalization?

A rehabilitation center is not systematic. Its relevance will be discussed in consultation with the surgeon, and is subject to a medical prescription.

I am a patient living abroad and would like to have surgery at the Toulouse University Hospital?

An initial consultation is a prerequisite for any intervention. It can take place via teleconsultation.

If a procedure is deemed necessary, an estimate is drawn up and sent to the patient by the Non-Resident Patient Service.

The patient must return this estimate signed and pay the amount of the estimate. Once payment has been received, hospitalization is arranged.

Notes

▲ Not to be missed

The date of your anaesthesia consultation:

- On-site: Purpan site, Hôpital Pierre-Paul Riquet, Hall B, 3^e floor, red color, in the anesthesia consultation department.

Documents you must have in your possession for the anaesthesia consultation:

- last prescription for current medical treatment
- latest blood test (less than 6 months old), if you have one, or results of the test prescribed by your surgeon
- your blood grouping card, if you have one
- last letter or report if you are being treated by a specialist (cardiologist, pneumologist, etc.)
- your most recent electrocardiogram, if you have one a dated and signed form appointing a trusted support person
- health care authorization for minors or protected adults

Date of hospitalization:

- Bring your own treatments
- Don't forget to bring your personal belongings if you're going to a post-operative SSR.
- Bring your social security card, health insurance card and proof of identity.
- Bring crutches, "cold" braces, compression stockings, etc.



NOTES

**Don't forget to fill in the online questionnaires
MAX and ORTHENSE**