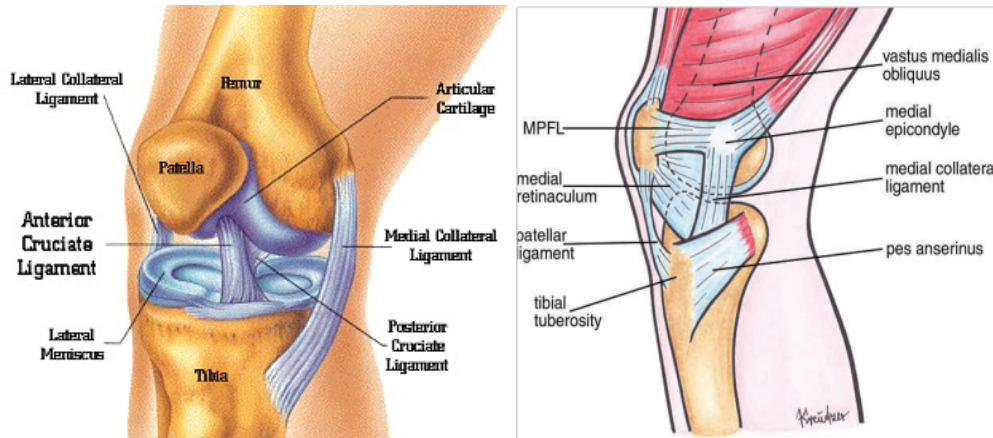


SURGERY SPECIFIC INFORMATION

PFJR + MPFL

Patellofemoral Joint Replacement & Medial Patellofemoral Ligament Reconstruction



Am I a candidate for PFJR + MPFL?

You are a candidate if you have patellar instability (kneecap dislocation) and front knee pain with examination findings that point towards kneecap arthritis (patellofemoral osteoarthritis). This is evaluated through the use of MRI and XRAY.

What is osteoarthritis and how does it occur?

Cartilage is the shiny, smooth coating at the end of bones. It protects the bone and allows the bones to move smoothly and efficiently. When this cartilage thins or becomes damaged, it's called osteoarthritis. It can be caused by a number of factors including genetics and injury.

What is the medial patellofemoral ligament (MPFL) and how is it damaged?

The MPFL is a ligament that stabilizes the patella (kneecap) and keeps it from displacing laterally. It is disrupted when someone dislocates his/her patella. When the kneecap dislocates towards the outside, this stretches the ligament on the inside of the knee, which is trying to keep the kneecap in place. This can result in either a tear of the MPFL or a detachment of the ligament from the bone. Additionally, when the kneecap goes out of place, and then back in, it knocks on the lateral femoral condyle (part of the thigh bone), which can often result in an injury to the cartilage and contribute to arthritis.

What does the surgery entail?

A vertical incision is made in the front of the knee. Focusing on the patellofemoral compartment, the damaged bone and cartilage in the knee joint are removed and the worn ends of the bone are shaped to fit the implant, which is inserted and attached to the bones with cement. The exact type of implants used is called Zimmer. The implants are made of cobalt chrome and high molecular weight plastic. Then, the injured MPFL ligament will be replaced with a graft, usually a quadriceps tendon from the same leg or a cadaver allograft. The graft is attached to the patella via small absorbable screws that hold the graft in place. The incision is then closed with absorbable sutures and Dermabond, a surgical glue and tape.

How long will I stay in the hospital?

This surgery is an in-patient procedure, meaning you will stay in the hospital after surgery. You will then be discharged home.

What are the possible risks and complications of surgery?

As with any surgery there is a risk of DVT, nerve damage, and postoperative infection. Specific risks and complications include but aren't limited to re-tear, infection, fracture, post-op stiffness, hardware complications, and conversion to TKR if arthritis develops in the other compartments of the knee.

Will I need antibiotics?

Yes. After surgery you will be given several doses of IV antibiotics in the hospital to prevent infection. Additionally, you will always need to take antibiotics prior to going to the dentist.

Will I need to be on blood thinners after surgery?

This will be discussed during your pre-operative clearance at HSS. Often, patients are put on Aspirin, but depending on your risk factors, you may have a different medication.

When can I drive? When can I go back to work?

You may not drive while taking pain medication. In addition, if it is your right knee that had surgery, you will not be able to drive for approximately 6 weeks after surgery or until the brace is removed. The recovery time needed before returning to work varies depending on your type of work, but is at least 3 weeks for office work and 8 weeks for manual labor.

Can I return to jogging, skiing, and other high-impact or contact sports?

If you comply with your physical therapy and post-operative instructions, achieving total muscle recovery, then there are no restrictions on any type of activity. However, studies have shown that, because the implants are mechanical devices, high loads cause them to wear out more quickly, resulting in a higher risk of needing a revision. You should avoid running activities.

What is the recovery period like?

- Brace
 - o You will wear a long hinged brace on your leg, known as a Bledsoe brace, and use crutches. You will wear it day and night, locked straight for 6 weeks. After your 6 week post-op visit, your provider will inform you how to unlock the brace.
 - While resting, it is ok to remove brace. However, brace must be worn while sleeping or bearing any weight.
- Weight bearing precautions
 - o You will be able to put as much weight on the leg as comfortable with brace locked straight AND while using an ambulation assistive device (walker, crutches, cane).
- Continuous Passive Movement (CPM) Machine
 - o Not necessary.
- Kneehab (quad stimulator)
 - o The quadriceps muscle will become very weak and atrophied following surgery. To limit and prevent the extent of this disuse weakness, you will use the kneehab quad stimulator. This consists of a neoprene sleeve with electrodes that stimulates the quadriceps muscle to keep it in shape.
 - Use for 20 minutes twice daily for 6 months
 - Device will be delivered to your home or given to you at your first post op visit.
- Physical Therapy
 - o You will **start formal PT in the hospital and continue when you are discharged**. We DO NOT recommend PT in the home after discharge. It is better to go to a facility.
 - You will go 2x/week for about 3-6 months.
 - Prior to surgery, you should have an idea of the PT facility you plan to go to. Please contact the office for recommended PT offices.
 - Dedication and attendance to your sessions are critical to your recovery.
 - o In addition to formal PT, do the following home exercises:
 - sets: 3 sets of 10 performed four times a daily.
 - Sit or lie on your back with leg straight. Tighten your quadriceps muscle on the front of the thigh. Hold for 3 seconds, relax.
 - Heel pumps: 3 sets preformed four times daily.
 - Sit or lie on your back with leg straight. Bend your foot up and down at your ankle joint, pumping the foot. Complete 10 pumps.

INSTRUCTIONS FOR IMMEDIATELY AFTER SURGERY:

- Activity
 - Apply ice to your knee but keep the bandages dry
 - Elevate your leg on 2-3 pillows or rolled up towels placed under the **heel** so that the heel is elevated higher than your knee. This will help reduce swelling and achieve full extension of the knee. **Avoid pillows under the knee.**
 - For the first 1-2 weeks after surgery, the **most important goal is to regain the ability to fully straighten the knee.** It is much more important initially than being able to bend the knee.
 - Start your home exercise program
- Bandage and Incision Care
 - The bulky ace wrap dressing will be removed while you are in the hospital. You may go home with a small dressing over the knee, or no dressing at all.
 - If you have a dressing on the knee, you may remove it 2 days after surgery. For further questions, contact the office.
 - Dermabond is a surgical glue and tape, this, along with absorbable sutures, is keeping the incision closed. Do not touch or peel the Dermabond.
 - Once home, keep the incision clean and dry. **Do not get the incision wet.** While showering, apply saran wrap over the knee and incision for the first 2 weeks. Do not apply creams, ointments, or lotions to your incisions.
- Showering
 - You may shower after you have removed the ace wrap. Although the bandaids are waterproof, you should wrap the leg in saran wrap to provide an extra waterproof layer.
 - **Do not get the incision or brace wet,** however, you must wear the brace when standing. You should use a shower chair, or if you have a bathtub-shower, you can sit in the tub. If you take a bath, keep the leg out of the bath. The leg should not be submerged.
- Pain Management and Cold Therapy
 - See POST-OP PAIN MANAGEMENT handout. Around 2 weeks out, you should only be taking the pain medication at night and after strenuous activity as needed.
- Normal sensations after surgery
 - Pain
 - Swelling and warmth up to 2 weeks
 - Small amounts of bloody drainage for first few days
 - Numbness around the incision area
 - Bruising
 - Low grade temperature less than 101.0 for up to a week after surgery.
 - Small amount of redness to the area where the sutures insert in the skin
- **IF ANY OF THE FOLLOWING OCCUR, CONTACT THE OFFICE IMMEDIATELY**
 - Calf pain in either leg
 - Change is noted to your incision (i.e. increased redness or drainage)
 - Temperature greater than 101.0
 - Fever, chills, nausea, vomiting or diarrhea
 - Sutures become loose or fall out and incision becomes open
 - Drainage becomes yellow, puss like or foul smelling
 - Increased pain unrelieved by medication or measures mentioned above.
- Post-op visit
 - Please ensure that you have a post-op visit scheduled. Please arrive 30-45 minutes prior to your appointment time to obtain X-rays.