

MPFL RECONSTRUCTION

Before Your Surgery

YOUR SURGERY AT A GLANCE

SURGERY	MPFL reconstruction with a donor-tissue graft, through small incisions. Usually with a lateral retinacular lengthening
HOW LONG	About 1–1.5 hours
ANESTHESIA	General anesthesia, with a nerve block for pain after surgery
WHERE	Proliance Surgery Center at Valley (PSCV) or Valley Medical Center (VMC), both in Renton. We will tell you which. You go home the same day
AFTER SURGERY	Full weight, brace unlocked for walking 6 weeks , crutches 2–3 weeks . PA visit at 2 weeks . X-rays at 6 weeks
PHYSICAL THERAPY	Starts 5 to 7 days after surgery, 2 times a week . Schedule it before surgery

Do these now, before surgery

- **Schedule physical therapy** for 5 to 7 days after surgery. You will get the referral at your pre-op visit.
- **Arrange a driver** and someone to stay with you for the first 24 hours.
- **Get your handicap placard** at a DMV office, using the application from your clinic visit, so you do not have to deal with it while recovering.
- **Get fitted for an ice machine** and stock up on bags of ice.

About Your Injury

The medial patellofemoral ligament (MPFL) is the main stabilizer that keeps your kneecap (patella) from sliding out of its groove toward the outside of the knee. It acts as a check-rein between the inner edge of the kneecap and the thigh bone (femur). When the MPFL is torn or stretched, the kneecap can dislocate or subluxate (partially shift out of place) during activity.

Patellar instability most often happens during twisting or pivoting movements. It is especially common in young athletes between the ages of 15 and 25. Most people feel the kneecap shift out of place, then major swelling and trouble bending the knee. Some have repeat episodes, with the kneecap slipping with less and less force each time.

Risk factors for repeat instability include a shallow groove on the femur (**trochlear dysplasia**), a kneecap that sits too high (**patella alta**), loose ligaments throughout the body (**ligamentous laxity**), and an increased distance between the tibial tubercle and the trochlear groove (**elevated TT-TG distance**). We check for these with X-rays and MRI before surgery.

Why surgery: after a first-time dislocation, physical therapy and bracing are often tried first. Surgery is recommended when the kneecap keeps dislocating or subluxating despite rehabilitation, or when imaging shows major structural risk factors that make future dislocations very likely.

About Your Surgery

MPFL reconstruction replaces the torn MPFL with a **graft**, a piece of tissue attached to the kneecap and femur in the position of the original ligament. Over time, the graft heals into the bone and works as a new check-rein. I typically use donor tissue (**allograft**), because it gives a strong new ligament.

A **lateral retinacular lengthening** is typically done at the same time. It loosens tight tissue on the outer side of the kneecap that may add to the tracking problem. Rebuilding the inner restraint (MPFL) and lengthening the outer tightness (lateral retinaculum) together center the kneecap in its groove.

Arthroscopy first checks the cartilage, confirms the diagnosis, and shows how the kneecap tracks. The graft is then placed through small incisions on the inner knee and secured to the bone with anchors or screws.

Risks of surgery

Stiffness, infection, blood clots, numbness around the incisions, continued pain and swelling, graft failure or re-dislocation, and fracture of the kneecap (rare). We will work together to lower these risks and make your recovery as smooth as possible.

Learn more and watch the videos

My website covers kneecap instability, MPFL reconstruction, and recovery in more detail. merrittsurgery.com/surgeries/patella-dislocation-and-instability



Scan to learn more
and watch videos

The Day of Surgery

What to expect, step by step.

1 A couple of days before

The nursing staff will call to confirm your check-in time and when to stop eating and drinking.

2 Check in

Check in at the front desk at your assigned time. In the pre-op area, with your family, our nurses will help you change, start an IV, and review your health history.

3 Meet the team

I will meet with you to review the plan, and the anesthesia team will explain their approach.

4 Surgery

When the operating room is ready, you will walk back with a nurse. After anesthesia is given, you will not remember anything until the recovery room. While you are in surgery, your family can pick up your post-operative medicines at the pharmacy (next to the surgery center at PSCV, or near the operating rooms at VMC).

5 Recovery room and going home

You will be monitored until you are awake, have some crackers and juice, and are comfortable. Then you will change into your clothes and be wheeled to your car. **You need someone to drive you home and stay with you for the first 24 hours.**

After Surgery: What to Expect

Pain, swelling, limited motion, and soreness on the inner side of the knee where the graft was placed are normal and improve over time. You will wear a hinged knee brace, **unlocked**, for walking during the first **6 weeks**. We start weaning it at 6 weeks, and it is usually off by **8 weeks**. The brace protects against the kneecap shifting but does not limit your motion: you can bend and straighten your knee freely during exercises.

You can put **full weight** on your leg from day 1. Unlike surgeries with a bone cut (osteotomy), the MPFL graft does not need weight-bearing limits. You will use crutches with the brace for the first **2–3 weeks** and wean off them as your strength and confidence improve.

VMO (inner quadriceps) strengthening is a key focus throughout recovery. The VMO helps stabilize the kneecap and works with the new graft to prevent future instability. Your recovery may be faster or slower depending on your overall fitness and any additional injuries. The key message: **we need to protect the reconstruction**, even though you will be very active and working hard in every phase of recovery.

When	What to expect
Weeks 1–2	PA visit at 2 weeks to check incisions and early recovery. Pain, swelling, and limited motion are normal. Full weight as tolerated with crutches, and the brace unlocked for walking. Quad and VMO activation exercises begin. PT starts 5–7 days after surgery, 2x a week.
Weeks 2–6	Keep the brace on for walking. Wean off crutches as strength returns. Motion should progress to 120° or more . Second clinic visit around 6 weeks with X-rays. Most people can return to desk work or school.
Weeks 6–12	Brace weaning starts at 6 weeks, usually off by 8 weeks . Begin functional strengthening such as mini-squats, step-ups, and leg press. Pain and swelling decrease a lot. No resisted open-chain knee extension exercises.
Weeks 12–20	Single-leg strengthening. Jogging can begin around 14–16 weeks . Two-leg plyometric exercises with PT guidance.
Months 5–6	Return to sport around 5–6 months with PT clearance. A formal return-to-sport evaluation is often done to confirm you are ready. No cutting and pivoting sports before 6 months.

Driving

- **Right leg:** you must be off crutches, have the brace unlocked or off, be off narcotic pain medicine, and be able to brake hard. Usually about 6–8 weeks.
- **Left leg:** typically 2–4 weeks, once you are off narcotic pain medicine.

Preparing for Surgery

Medicines and supplements before surgery

- The pre-op nurse will tell you when to stop eating and drinking.
- **Stop fish oil, vitamin E, and herbal supplements 5 days before surgery.**
- **Tell us** if you take a blood thinner (such as Eliquis, Xarelto, warfarin, or Plavix) or a weekly diabetes or weight-loss injection (such as Ozempic, Wegovy, or Mounjaro). These may need to be stopped earlier.

Physical therapy before surgery (prehab)

PT before surgery is recommended to strengthen the VMO, improve motion, decrease swelling, and restore normal walking. It typically takes **4–8 weeks** after your last dislocation, and leads to a faster, better recovery.

Nutrition

What you eat has a direct effect on how well you heal. Start good nutrition before surgery and continue through your recovery. Our nutrition guide explains what to take and how much: merrittsurgery.com/surgeries/nutritional-optimization



Scan for the nutrition
guide

Ice machine: my #1 recovery recommendation

An ice machine is the single best investment you can make for your recovery. It makes icing **20 minutes on, 20 minutes off** easy, without the risk of frostbite, and is far easier than ice bags or gel pads. Our clinic staff can fit you for one before surgery and show you how to get the most out of it. Stock up on bags of ice: the machine can use a bag a day. **Scan the code to learn more or buy one.**



Scan for recovery tools

Get your home ready

- Remove throw rugs or obstacles that might catch a crutch and cause a fall.
- Have clean sheets and comfortable clothes ready. Stock the refrigerator with healthy food and buy bags of ice.

Day-of-Surgery Checklist

- ☐ Verify your check-in time and follow the instructions on when to stop eating and drinking
- ☐ Physical therapy scheduled for 5–7 days after surgery
- ☐ Bring your brace (you will be fitted at your pre-operative visit)
- ☐ Wear comfortable clothes that fit over a brace (sweatpants work well)
- ☐ No perfume or lotion on your skin
- ☐ Remove jewelry or leave it at home
- ☐ Ice machine and bags of ice ready at home for when you return
- ☐ A driver, and someone to stay with you for the first 24 hours
- ☐ If you are under 18: one family member must stay at the surgery center or hospital during the entire surgery

Contact Information

Questions about your surgery	(425) 656-5060
PSCV Surgery Center	(425) 226-2041
Surgery scheduling	(425) 528-7155
Pre-op nurse	(425) 291-1465
Billing	(425) 291-1414
PSCV address	4009 Talbot Rd S, Ste 200, Renton, WA 98055
VMC address	400 S. 43rd Street, Renton, WA 98055