

QUADRICEPS TENDON REPAIR

Before Your Surgery

YOUR SURGERY AT A GLANCE

SURGERY	Repair of the torn quadriceps tendon to the top of the kneecap, with heavy stitches through small tunnels in the bone
HOW LONG	About 1 hour
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	Hinged knee brace locked straight at all times for 6 weeks , including sleep. Full weight with the brace locked, crutches as needed. PA visit at 2 weeks . Clinic visit at 6 weeks
PHYSICAL THERAPY	Starts 5–7 days after surgery, 2 times a week . Schedule it before surgery

Do these now, before surgery

- **Schedule physical therapy** for 5–7 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 quadriceps tendon connects the large thigh muscles (quadriceps) to the top of the kneecap (patella). It is part of the **extensor mechanism**, the system of muscles and tendons that lets you straighten your leg, stand from a chair, walk, and climb stairs.

Quadriceps tendon ruptures most often happen in men over 40. The injury usually happens during a sudden, forceful movement, such as catching yourself from a fall or stumbling. You likely felt a sudden pop, then immediate swelling and an inability to straighten your leg. There may be a visible gap or dent just above the kneecap.

Some health conditions can weaken the quadriceps tendon over time and raise the risk of rupture. These include diabetes, kidney disease, gout, and long-term use of corticosteroids or fluoroquinolone antibiotics. **If you have any of these, please let us know** so we can factor them into your recovery plan.

Why surgery: when the quadriceps tendon ruptures, you lose the ability to actively straighten your knee. Surgery is required to restore this function.

Timing of repair is important. I prefer to do this surgery **within 14 days of the injury** whenever possible. An early (acute) repair, done while the tissue is still fresh, is more straightforward and gives better results

than a delayed repair. With a delay, the tendon can pull back and scar, and sometimes extra graft tissue is needed to bridge the gap.

About Your Surgery

Quadriceps tendon repair reattaches the torn tendon to the kneecap under the correct tension. The torn ends are found and freshened, and the tendon is secured to the top of the kneecap (the superior pole) with heavy stitches passed through tunnels drilled in the kneecap.

How far you may bend your knee after surgery is decided during surgery, based on the quality and strength of the repair. So your exact motion limits will not be known until the surgery is done. I will give these limits to you and your physical therapist after surgery. Typically, the starting range is **40–60° of bending**, increasing a little each week.

Risks of surgery

Re-rupture of the repair, stiffness from too little early motion, infection, blood clots, wound healing problems, numbness around the incision, continued pain and swelling, and uneven kneecap position. We will work together to lower these risks and make your recovery as smooth as possible.

Learn more on my website

My website covers quadriceps and patellar tendon tears, the repair, and recovery in more detail. merrittsurgery.com/surgeries/patella-tendon-and-quad-tendon-tears



Scan to learn more

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, and limited motion in the knee are normal after surgery and improve over time. You will wake up in a hinged knee brace **locked straight**. From the first day after surgery, **you may put full weight on the leg with the brace locked straight**. Crutches are for comfort and safety and are weaned as you are able. Many people walk without them in the locked brace within a few weeks. **Wear the brace at all times, including during sleep, for the first 6 weeks.**

Bend your knee only when you are not putting weight on it: sitting or lying down, at home and at physical therapy, within your limit. **Never bend your knee while standing or walking.** I will write the degrees of motion allowed after surgery and share them with your physical therapist.

Waking up your quad (thigh muscle) is the top priority early on. Because the tendon must be protected, your quad will weaken quickly. Your therapist provides electrical muscle stimulation (NMES) and blood flow restriction (BFR) training, starting as soon as PT starts, to prevent too much muscle loss. These are primary treatments, not optional extras. Kneecap mobilization, gently gliding the kneecap up and down, also starts in the first week. Upward glides are especially important to keep the kneecap from getting stuck in a low position.

The timeline below is a general guide, not a strict schedule. Everyone heals at a different pace, and I will guide your progress based on your healing.

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 with the brace locked straight. Bending only when not bearing weight, within your limits. NMES and BFR start with your therapist. PT starts 5–7 days after surgery, 2× a week.
Weeks 2–6	Brace stays locked for all standing and walking. Bending advances as prescribed, typically reaching 90° by 6 weeks . Quad sets, straight-leg raises (only with the brace locked, once your therapist starts them), and kneecap mobilization. Brace worn at all times, including sleep.
Weeks 6–12	6-week clinic visit. The brace is unlocked for walking in stages. You still use it for walking, but no longer need it for sleep. Stationary bike begins, with partial pedal turns at about 90° of bending and full turns once you bend about 110°. Quad strengthening progresses, with no resisted knee extension (machines or weights) until 8–10 weeks . By about 3 months, most people are off crutches and walking normally. Brace stops around 3 months.
Months 3–6	Progressive strengthening such as leg press, step-downs, squats, and lunges. Swimming, cycling, and walking programs resume. Quad strength is the main focus. Running typically begins around 6 months if strength testing is adequate.
Months 6–12	Return to sport around 9–12 months , with formal testing and surgeon clearance. Studies show 80–100% patient satisfaction after quadriceps tendon repair, with strong function. Sticking with the full PT program is the single biggest factor in your recovery.

Driving

- **Right leg:** not before 6 weeks, usually about 6–8 weeks, and only once you are off crutches, the brace is unlocked or off, you are off narcotic pain medicine, and you can brake hard.
- **Left leg:** typically 1–2 weeks (automatic car), once you are off narcotic pain medicine.
- Safety is the benchmark.

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.

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 for the ice machine.

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