

OSTEOCHONDRAL ALLOGRAFT WITH ACL RECONSTRUCTION

Before Your Surgery

YOUR SURGERY AT A GLANCE

SURGERY	Osteochondral allograft (OCA) of the femoral condyle plus ACL reconstruction, in one surgery
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	Hinged knee brace and crutches, toe-touch for 6 weeks . PA visit at 2 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.
- **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

Articular cartilage covers the ends of the bones in the knee and lets them glide with almost no friction. It has no blood supply, so it cannot heal itself. A cartilage injury left alone does not get better. It gets larger. Think of the joint surface as a road. A focal cartilage defect is a pothole in an otherwise intact surface. Our goal is to fill that pothole before the road wears down further.

The **ACL** (anterior cruciate ligament) is one of the main stabilizing ligaments in the knee. It connects the thigh bone (femur) to the shin bone (tibia) and keeps the knee from shifting and rotating during activity. ACL tears most often come from non-contact twisting injuries in sports.

Your imaging shows **both** a cartilage defect on the femoral condyle (the end of the thigh bone) **and** an ACL tear.

Why surgery: when both problems exist, they must be treated together. Reconstructing the ACL without treating the cartilage leaves the joint surface unprotected, and the reverse is also true. Treating only one would doom the other to fail over time. This combined surgery gives you the best chance of long-term knee health.

About Your Surgery

This is a combined surgery: an **osteochondral allograft (OCA)** to replace the damaged cartilage and the bone underneath, plus an **ACL reconstruction** to restore knee stability. Both are done in a single surgery.

OCA: a size-matched donor bone-and-cartilage plug from a tissue bank replaces the defect. The cartilage comes from the donor; the bone underneath heals to your own bone (bone-to-bone healing).

ACL reconstruction: the torn ACL is replaced with a graft, either your own tissue (autograft) or donor tissue (allograft). Tunnels are drilled in the femur and tibia, the graft is passed through, and it is fixed with screws or other hardware. We will discuss your graft options (patellar tendon, hamstring, or allograft) at your clinic visit.

The OCA sets the weight-bearing rules (toe-touch for 6 weeks). **The ACL sets the return-to-sport timeline** (at least 9 months). Donor tissue comes from an accredited tissue bank and goes through rigorous screening and testing for infectious diseases. The risk of disease transmission is extremely low.

Risks of surgery

Stiffness, infection, blood clots, numbness around the incisions, continued pain and swelling, graft failure, and the need for more surgery. We use a nerve block and a pain plan after surgery to keep narcotic use low.

Learn more and watch the videos

My website covers cartilage injuries, the difference between OCA and other cartilage repairs, and recovery in more detail. merrittsurgery.com/surgeries/cartilage-repair-restoration



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 stiffness are normal after surgery and improve over time. You will be **toe-touch weight bearing for 6 weeks**: your crutches carry your weight, and your foot touches the floor with **about 10 to 15 pounds**, for balance. After 6 weeks, weight is added step by step. The hinged brace is **unlocked from day 1** and worn for walking. You do not need it for sleep, and you take it off for motion exercises and hygiene. You stop the brace after you are off crutches, usually about **8–10 weeks**.

Motion exercises begin right away. The goal is **90° of bending by the end of week 1** and **about 110° by the end of week 2**. Two healing timelines run side by side: the OCA bone heals quickly, but the ACL graft matures more slowly. **The ACL drives your return to sport (at least 9 months)**. Respecting the biology of healing is just as important as effort in physical therapy.

When	What to expect
Weeks 0–6	Toe-touch weight bearing : crutches carry your weight (about 10–15 lb, for balance). Hinged brace unlocked from day 1. Bending 90° by week 1 , about 110° by week 2 . Quad sets, straight-leg raises, heel slides, ankle pumps, and kneecap mobilization. NMES (electrical muscle stimulation) starts at your first PT visit. Recumbent bike (low resistance) once bending reaches about 100°, usually weeks 4–6.
Weeks 7–10	Weight bearing increases. Two crutches, then one, then none by weeks 8–10 ; the brace stops once you are off crutches. Mini-squats and step-ups begin. Continue protecting the ACL graft.
Months 3–5	Progressive strengthening: squats, leg press, lunges. Low-impact conditioning: cycling, swimming, elliptical. Running may begin around months 4–5 after the step-down test and surgeon clearance.
Months 5–9	Running progression. Plyometrics progress from two legs to one (two-leg preparation starts around weeks 13–14). Sport-specific conditioning without cutting or pivoting.
Months 9–12	Return to cutting, pivoting, and impact sports after meeting all strength and functional criteria and surgeon clearance. Formal return-to-sport evaluation, including a psychological readiness score (ACL-RSI). MRI and clinical assessment.

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 10–12 weeks.
- **Left leg**: typically 4–6 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.
- **No anti-inflammatory medicines.** Stop ibuprofen (Advil, Motrin), naproxen (Aleve), meloxicam, celecoxib (Celebrex), diclofenac, and anti-inflammatory creams and gels such as Voltaren **7 days before surgery**, and do not take them for **6 weeks after surgery**. They can slow bone and cartilage healing. The low-dose (81 mg) aspirin we prescribe after surgery is different: take it as directed.

Physical therapy before surgery (prehab)

Physical therapy before surgery is recommended to strengthen the VMO (inner quadriceps), improve motion, decrease swelling, and restore normal walking. This usually takes **4–8 weeks** after your most recent injury episode, and it leads to a faster and 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, and leave jewelry 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