

BEAR ACL REPAIR

Before Your Surgery

YOUR SURGERY AT A GLANCE

SURGERY	ACL repair with the BEAR Implant, which helps your own ACL heal. An LET may be added in some high-risk patients
HOW LONG	About 1 hour
ANESTHESIA	Spinal or 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, and crutches with half your weight for 4 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. 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 anterior cruciate ligament (ACL) is one of the main stabilizing ligaments in your knee. It connects your thigh bone (femur) to your shin bone (tibia) and crosses through the center of the knee. The ACL keeps your knee from shifting and rotating during activity.

The ACL is most commonly injured during sports. The typical situation is a non-contact, twisting injury, such as changing direction in soccer or football, or landing awkwardly after a jump in basketball or volleyball. Skiing, wrestling, and martial arts can also cause ACL tears. Most people feel a pop in the knee followed by rapid swelling and stiffness.

Repair or reconstruction: not every ACL tear can be repaired. Often the torn ligament must be replaced with a new graft (an ACL reconstruction). In certain tears, the ACL can be repaired and allowed to heal in place. This depends on the tear pattern, the quality of the remaining tissue, and the time since injury. I will recommend the best approach for your injury.

About Your Surgery

ACL repair with the **BEAR Implant** (Bridge-Enhanced ACL Repair, by Miach Orthopaedics) is a newer approach that helps your own ACL heal instead of replacing it with a graft. The torn ends of your ACL are

brought together, and a small, body-friendly implant is placed between them and filled with a little of your own blood. It acts as a scaffold, a **bridge**, that encourages your body's natural healing to repair the ligament.

BEAR uses no tendon from elsewhere in your body, so hamstring and quad strength are usually better preserved. The implant dissolves as your own tissue heals. In some high-risk patients, an extra stabilizing procedure, a **lateral extra-articular tenodesis (LET)**, may be added to further lower the risk of re-tear. After surgery you will be in a **hinged knee brace**, an important part of BEAR recovery, for several weeks.

Risks of surgery

Stiffness, infection, blood clots, numbness around the incisions, continued pain and swelling, and the chance that the repaired ACL does not fully heal. If it does not heal well enough, a standard ACL reconstruction can be done later. We will work together to lower these risks.

Learn more on my website

My website explains the BEAR procedure, who is a good candidate, and what recovery looks like. merrittsurgery.com/surgeries/acl-repair-bear-surgery



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

Remember to bring your brace. 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

Early recovery after BEAR is more protective than after an ACL reconstruction. Your own ligament is healing, not a new graft, so we must carefully protect it in the first weeks. Follow the brace and weight rules closely.

Key BEAR recovery rules

- **Partial weight bearing:** half your body weight (50%) with crutches for the first **4 weeks**. Full weight begins at week 4, when your quad strength and walking are ready.
- **Brace locked straight (0°)** for walking and sleep in **weeks 0–4**. Unlocked for seated bending: **0–45°** in weeks 0–2, then **0–90°** in weeks 2–4. Fully unlocked at week 4 when you meet the criteria.
- **No forced stretching or manual bending.** All motion comes from your own active movement, never from anyone pushing on your knee.

Quad activation with electrical stimulation (NMES) at PT is essential early on. Recovery is **criteria-based**. You move ahead by meeting goals for strength, motion, and swelling, not just by the calendar.

When	What to expect
Weeks 1–4	Half weight with crutches, brace locked for walking. NMES at PT. Gentle active motion, no forced stretching. Ice and elevation. Bike once cleared (often weeks 2–3), gentle rocking only, no resistance . PT 2× a week. PA visit at 2 weeks.
Weeks 4–7	Full weight and off crutches when quad control and walking are ready. Brace unlocked for walking. Motion toward full. Bike with light resistance. Clinic visit to check progress.
Weeks 7–12	Walking without any walking aid. Step-ups, leg press, and single-leg exercises. Water jogging and elliptical.
Months 3–5	Running (treadmill walk-jog) only after surgeon clearance, quad strength testing, no swelling, and full motion. Strength and balance work. No cutting or pivoting .
Months 5–7	Faster, longer running. Two-leg jumping and landing drills to prepare for plyometrics. Build strength until both legs are equal.
Months 7–9	Controlled agility and cutting drills at 50–75% speed start around week 30 . Full-speed cutting waits until week 36 (about 9 months) . Hop testing to compare both legs.
Months 9–12	Return to cutting and pivoting sports when all criteria are met, after a formal return-to-sport test with PT and surgeon clearance.

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 4–6 weeks.
- **Left leg:** usually about 4 weeks. You must be off narcotic pain medicine and out of the locked brace.

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)

Surgery is recommended only after your knee has recovered from the first swelling and stiffness. In most cases, PT before surgery decreases swelling, activates the quadriceps, restores motion, and lets you practice walking without pain. It takes about **4–8 weeks** after injury 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

- You will be on crutches for about 4 weeks. Remove throw rugs or obstacles that could catch a crutch.
- Have clean sheets and comfortable clothes ready. Stock up on healthy food and 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