

BEAR ACL REPAIR WITH MENISCUS ROOT REPAIR (NON-WEIGHT BEARING)

Before Your Surgery

YOUR SURGERY AT A GLANCE

SURGERY	ACL repair with the BEAR Implant, plus a meniscus root or radial repair. An LET may be added in some high-risk patients
HOW LONG	About 1–1.5 hours
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 for 6 weeks . No weight on the leg for 6 weeks , on crutches. 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. Also arrange help with meals, groceries, and rides for the first several weeks.
- **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.

You also have a **meniscus root or radial tear** that will be repaired at the same time. The meniscus root is where the meniscus anchors to the bone. When it tears, the meniscus can no longer absorb shock, and the knee behaves as if the meniscus were missing. Root and radial repairs are the most important meniscus repairs to protect. **You must not put any weight on the leg for the first 6 weeks.** Even a single step can disrupt the repair before it has time to heal.

Repair or reconstruction: not every ACL tear can be repaired. In many cases the torn ligament must be fully replaced with a new graft. This is called an ACL reconstruction. In certain types of tears, though, the torn ACL can be repaired and allowed to heal in place. Whether your tear can be repaired depends on the tear pattern, the quality of the remaining tissue, and the time since your injury. I will discuss this with you and 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. It helps your own ACL heal instead of replacing it with a graft. During surgery, the torn ends of your ACL are brought together and a small implant that your body tolerates well is placed between them. A small amount of your own blood is injected into the implant. It then acts as a scaffold, a **bridge**, that encourages your body's natural healing to repair the ligament.

Because BEAR repairs your own ACL instead of using a tendon from another part of your body, your hamstring strength is usually better preserved after surgery. The implant dissolves over time as your own tissue heals and takes over. In some high-risk patients, an extra stabilizing procedure called a **lateral extra-articular tenodesis (LET)** may be added to further lower the risk of re-tear.

Your meniscus root will be repaired in the same surgery, with stitches that reattach the torn root to the bone. This is the most restrictive combined plan. **The root repair sets the weight rule:** no weight on the leg for 6 full weeks, because any load can damage the repair before it attaches to the bone. **The BEAR plan sets the motion rules:** no forced stretching and no manual bending. Your knee must not bend past **90° for the first 6 weeks**. Deep squats and bending past 90° under load wait until **Month 5**.

You will be in a **hinged knee brace** after surgery. The brace is an important part of BEAR recovery and will be used 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 the repair does not heal well enough, a standard ACL reconstruction can be done later. We will work together to make your recovery as smooth as possible and 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

This is the most protective of all our ACL recovery plans. Your own ligament is healing, and the root repair, the most important meniscus repair, needs to be fully unloaded to heal. **Your foot does not touch the floor for the first 6 weeks.** Crutches carry all of your weight. This is not negotiable. During this time, electrical stimulation (NMES) at PT is essential, and blood flow restriction (BFR) training is strongly recommended to keep your quad from losing too much strength.

Key BEAR + meniscus root rules

- **No weight on the leg for 6 full weeks.** Crutches carry all your weight, and your foot does not touch the floor. Even one step can disrupt the root repair. This is the most important rule of your recovery.
- **Brace locked straight (0°)** for crutch walking and sleep. It allows **0–90°** for seated exercises in weeks 2–6. The brace is unlocked from **week 6** when you meet the criteria.
- **Bend only to 45° for the first 2 weeks, then never past 90° until 6 weeks.** This protects both the BEAR repair and the root repair.
- **No deep squats, lunges, or bending past 90° under load until Month 5,** to keep protecting the root repair.
- **No forced stretching or manual bending.** You gain all your motion with your own active movement, never by anyone pushing on your knee.
- **BFR training is strongly recommended** while you have no weight on the leg, to prevent major quad and hamstring muscle loss.

Recovery is **criteria-based**. You move through each phase by meeting goals for strength, motion, and swelling, not just by the calendar. This is a longer, more structured recovery. **Running starts no earlier than Month 5 (week 20)** to protect the root repair. Return to cutting and pivoting sports usually takes **9–12 months**.

When	What to expect
Weeks 1–6	No weight on the leg. Crutches carry all your weight. Brace locked straight for crutch walking and sleep. Bending only to 45° for 2 weeks, then no more than 90°. Quad activation with NMES at PT is essential, and BFR training is strongly recommended. Gentle active motion, no forced stretching. Ice and elevation. PT starts 5–7 days after surgery, 2× a week. PA visit at 2 weeks.

Weeks 6–10	Start partial weight (25–50% of your body weight) at week 6. Increase slowly, guided by comfort and quad control. Brace unlocked for walking. Motion progresses past 90°. Stationary bike begins at week 6. Wean off crutches as quad strength allows.
Weeks 10–14	Full weight by weeks 10–12 . Walking without crutches. Strengthening with step-ups, leg press, and single-leg exercises. A functional ACL brace is used only if I prescribe it. Water jogging and elliptical. All loaded bending limited to 90° through Month 5.
Months 4–6	Running begins at Month 5 (week 20) , only after surgeon clearance, quad strength of at least 80%, no swelling, and full motion. The meniscus bending limit lifts at Month 5. Strength and balance training. No cutting or pivoting.
Months 6–9	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 evaluation with PT and surgeon clearance. If I prescribed a functional brace, keep using it during sport as I advise.

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 8–12 weeks.
- **Left leg:** usually about 6 weeks, once the brace is unlocked.
- Either way, you must be off narcotic pain medicine and out of the locked brace before driving.

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 we recommend physical therapy before surgery to decrease swelling, activate the quadriceps muscle, restore range of motion, and practice walking without pain. This usually takes **4–8 weeks** after your injury. Working on these things before surgery 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

You will have **no weight on the leg, on crutches, for 6 full weeks**, so your home needs real preparation.

- Remove throw rugs or obstacles that might catch a crutch and cause a fall.
- Set up a ground-floor sleeping area if possible.
- Have a shower chair or stool ready.
- 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