

PCL RECONSTRUCTION

Your First Two Weeks After Surgery

Your surgery is done, and now the recovery starts. This guide walks you through the first two weeks, from the day of surgery until **your PA visit at 2 weeks** (your follow-up with our physician assistant). Keep it somewhere handy. It answers most of the questions patients call us about. Your medicines are covered in the separate **Medication Guide** that comes with it.

YOUR PLAN AT A GLANCE

WEIGHT ON YOUR LEG	None, strictly, through 6 weeks. Not even a toe-touch. Crutches for every step
BRACE	Locked fully straight, day and night , including sleep. Off only for PT-taught exercises and washing
BENDING	Only lying face-down , once your therapist shows you how. Goal: 90° by 4 weeks
KEY RESTRICTION	Support the back of your calf. Never bend the knee on your back. No hamstring exercises
PHYSICAL THERAPY	Starts 5 to 7 days after surgery, 2 times a week
SHOWERING	Starting 48 hours after surgery, seated, with the incisions covered until your PA visit. No baths, pools, or hot tubs for 4 weeks
FOLLOW-UP	Your PA visit at 2 weeks
QUESTIONS	(425) 656-5060 , day or night

What We Did

Your PCL (posterior cruciate ligament) is the strongest ligament in the knee. It sits at the back of the joint and keeps your shin bone from sliding backward. We **replaced your torn PCL with a new ligament, called a graft**, passed through small tunnels in the bone.

Gravity is the enemy of your new PCL. Lying on your back with the shin unsupported, gravity pulls the shin bone backward and stretches the graft. So does your hamstring (the back of your thigh). **This is a marathon, not a sprint.**

Your three jobs for the next two weeks

- **Keep the shin supported.** Brace locked straight, a pillow under your calf, and no bending on your back.
- **No weight on the leg at all.** Crutches every time you are up.
- **Wake up your quad** (the big muscle on the front of your thigh) and keep your kneecap moving.

Day by Day

What to do, and what to expect, from the day of surgery to your PA visit.

DAY 0

The Day of Surgery

Goal: Rest, ice, elevate, and keep the shin supported.

Rest today. The main goal is to **prevent swelling and pain** and get your recovery started. **Icing and elevation** are the two best ways to do that.

- **Pillow under your calf, always.** When lying on your back, put a pillow under your **upper calf**, just below the knee, so the shin is held up. Never put the pillow under the knee, and never let the calf rest unsupported.
- **The brace stays locked fully straight**, day and night.
- **Ice right away**, 20 minutes on, 20 minutes off. Put the ice machine pad directly over the ACE wrap. The dressing protects your skin.
- **No weight on the leg.** Hold the surgery foot off the floor and let your crutches and good leg do the work.
- **Your leg will feel heavy.** When someone helps you move it, they should support it **under the calf**, not lift it by the foot.
- **Ankle pumps:** point and flex your foot 20 times every hour you are awake. This keeps blood moving in your calf.

Your nerve block

Before surgery you had a **saphenous nerve block**, numbing medicine placed near a nerve on the inside of your thigh. It numbs the inside of your knee and shin and usually wears off **12 to 24 hours** after surgery. Pain often climbs the first night as it fades. **Take your pain medicine before bed on the first night, even if you feel fine.** It is much easier to stay ahead of pain than to catch up to it. Numb skin can't feel when it is getting too cold, so **never put ice directly on bare skin.**

Before bed tonight

- ☐ Pain medicine taken
- ☐ Brace on and locked straight
- ☐ Ice machine on, pillow under the upper calf
- ☐ Ankle pumps done, crutches next to the bed

DAY 1

The Day After Surgery

Goal: Take off the bulky dressing, refit the brace, and wake up the quad.

1 Remove the bulky dressing

Lie on your back with a pillow under your calf. Have someone help. Undo the brace straps and remove the ACE wrap, keeping the leg straight and supported. **Save the ACE wrap.** Under it are gauze pads. Some dried blood on the gauze is normal. Throw the gauze away. The incisions are closed with **dissolving stitches** under the skin, with small tape strips called **Steri-Strips** on top. **Leave them alone.** They fall off on their own in 2 to 4 weeks. Nothing needs to be removed. After today, cover the incisions with **dry gauze** as needed, held by the ACE wrap. **No creams, lotions, or ointments** on the knee for 4 weeks.

If the gauze is soaked through or an incision is actively dripping, call **(425) 656-5060**. This is very unlikely.

2 Refit the brace, locked straight

Put the brace right back on, **locked fully straight**. It will feel loose now that the dressing is off. Undo the Velcro and shorten the straps to snug it up. If a strap rubs on an incision, wrap the ACE wrap between your skin and the brace.

3 Wake up your quad

- **Quad sets:** With your leg straight in the brace, tighten the muscle on the front of your thigh. Try it on your other leg first to feel what it should feel like. Hold 6 to 10 seconds, then relax. Do sets of 10 to 15, **every 1 to 2 hours you are awake**. A strong quad pulls the shin forward and protects the graft.
- **Straight-leg raises:** With the brace locked, tighten your quad first, then lift the straight leg 6 to 12 inches off the bed and hold for a few seconds. You may not be able to do this at first. Your strength will come back.
- **Kneecap glides:** your therapist will teach you to gently slide your kneecap up, down, and side to side each day. Long bracing makes the kneecap stiff, and this prevents it.

Protect the new PCL

- **Never bend your knee while lying on your back.** No heel slides. Bending is done only face-down, the way your therapist teaches you.
- **Don't use your hamstring.** Don't curl your heel toward your bottom or dig your heel into the bed.
- **Don't let the knee bend backward** past straight.
- **Don't sit with the leg hanging down.** When sitting, keep it straight out on a stool with the calf supported.

4 Bending: wait for your therapist

Your knee will bend only **lying face-down**, with gravity pulling the shin forward instead of backward. Your physical therapist will show you exactly how at your first visit, and then you'll do it at home. Until then, keep the brace locked. Goal: **90° by about 4 weeks**.

Sleeping

Sleep with the brace on and locked straight, on your back with a pillow under your upper calf.

DAYS 2–7

The Rest of the First Week

Goal: Shin supported, no weight on the leg, quad firing, physical therapy started.

- **No weight on the leg**, brace locked, every time you are up. Short trips around the house, then back to rest with the calf supported and the leg elevated.
- **Quad sets every 1 to 2 hours** you are awake, and straight-leg raises several times a day.
- **Start physical therapy 5 to 7 days** after surgery. Expect 2 visits a week. Bring your PT prescription and protocol. Take your pain medicine about 30 to 60 minutes before PT if motion is painful.
- **Shower starting 48 hours after surgery**, with the incisions covered. See the Frequently Asked Questions.
- **Swelling peaks around days 2 and 3**, and bruising may creep down to your ankle. Both are normal. Keep icing and elevating.

- **Start cutting back the narcotic pain medicine** as the pain allows. See your Medication Guide.

WEEK 2**Until Your PA Visit**

Goal: Face-down bending, a stronger quad, and the graft still protected.

- **Face-down bending** a few times a day, as your therapist taught you. Keep working toward 90° by 4 weeks.
- **Still no weight on the leg at all**, strictly, through 6 weeks. The brace stays **locked straight day and night**.
- **Still no bending on your back, and no hamstring exercises.** No leg curls for 12 weeks.
- **School or desk work:** many people are ready around 2 weeks if they can get around safely on crutches. Keep the leg up, supported under the calf, and iced when you can.
- **Keep going to PT** and doing your home exercises.

Your PA visit at 2 weeks

We will check your incisions, your motion, and your quad, review how PT is going, and answer your questions. Write your questions down as they come up, and bring this guide and your brace.

Managing Pain

Your medicines are explained on the separate **Medication Guide** that comes with this packet. Medicine is only one of the tools you have. These have been shown to lower pain and the amount of narcotic medicine people need:

- **Ice, elevation, and the anti-inflammatory medicine.** These three together are your best tools for pain and swelling.
- **Mindfulness meditation** has been shown to help with pain after surgery. Guided meditations are free at mindfulness-for-pain.mindful.org.
- **Listening to music** lowers pain levels and the need for narcotic pain medicine after surgery.
- **Accept that some pain is part of healing.** Your body sends blood flow and energy to the areas that hurt, and that is part of recovery. After the first couple of days, our goal is a pain level of about **6 out of 10 with medicine**. "Zero pain" is not the goal.

Expect pain to be worst on days 2 and 3. Most patients feel pretty good the day of surgery because of the numbing medicine used during surgery. Then things get sorer before they get better. This is normal and it passes.

Constipation

Narcotic pain medicine commonly causes constipation. Try these in order:

1. Cut back on the narcotic pain medicine if your pain allows.
2. Drink plenty of water and other decaf fluids.
3. Eat dried prunes or drink prune juice.
4. Take Senna (Senokot), an over-the-counter laxative.
5. Add Miralax, a stronger over-the-counter laxative.
6. If you have not had a bowel movement in 5 days, call the office.

Your Ice Machine

If you have an ice machine (most of our patients have the **Breg Polar Wave**), **use it a lot**. It is one of the most effective tools you have for swelling and pain, especially in the first two weeks.

- **Use it 20 minutes on, 20 minutes off**, as often as you can while you are awake.
- **Day of surgery:** Put the pad on right over the ACE wrap and bandage. The dressing protects your skin.
- **Compression is fine from day one.** If your machine has a compression setting, use it. Cold plus compression controls swelling better than ice alone.
- **After the bulky dressing comes off:** Always keep a thin layer (a t-shirt, pillowcase, or the ACE wrap) between the pad and your skin. Check your skin each time you take the pad off.
- **Keep the leg elevated while icing.** Ice works best when the leg is above your heart.
- **No ice machine?** Bags of ice or frozen peas wrapped in a thin towel work well, on the same 20 minutes on, 20 minutes off schedule.

Eat to Heal

What you eat has a **direct effect on how well and how fast you recover**. After surgery your body breaks down muscle to get the building blocks it needs for healing. Good nutrition lets it rebuild instead.

- **Protein:** Aim for 1.6 to 2.0 grams per kilogram of your ideal body weight each day. Most people eat far less. A protein shake is an easy way to close the gap when your appetite is low.
- **Creatine:** 10 grams a day. It helps muscle energy and lowers inflammation, and it is one of the most studied and safest supplements. Let your other doctors know you take it, since it can raise a kidney number (creatinine) on blood work.
- **Vitamin D:** 2,000 to 5,000 IU a day. Important for bone healing and your immune system.
- **Vitamin C:** 500 mg twice a day. Your body needs it to make collagen, the protein that holds tendons, ligaments, and your repair together.
- **Collagen peptides:** 10 to 20 grams a day, taken with the vitamin C.
- **Water:** 8 to 10 glasses a day. Well-hydrated patients have less pain, nausea, and fatigue.

The full nutrition guide is at merrittsurgery.com/surgeries/nutritional-optimization

Is This Normal?

Use this page to decide whether to wait it out, call us, or call 911.

OK
NORMAL

NORMAL — expected after surgery

- **More swelling on days 1 to 3** than on the day of surgery
- **Bruising** that spreads down the shin, calf, ankle, and even the foot over the first week (gravity pulls it down)
- Some **bloody fluid** on the bandage for the first 24 to 36 hours
- A **low fever up to 100.5°F** for the first 2 to 5 days. Deep breaths help bring it down
- **Numbness** around the incision and nearby skin. It usually improves, but can take 6 to 12 months
- A **warm** knee for several weeks
- Trouble sleeping, low energy, or feeling down for a few days

CALL
CALL US

CALL US — (425) 656-5060

- **Temperature of 101.5°F or higher**, or shaking chills
- **Redness that spreads** away from an incision, or drainage that is cloudy, smells bad, or soaks the gauze
- Any drainage that **starts or continues after day 4**
- **Calf pain or swelling that keeps getting worse**, especially if it is only in one leg
- Pain that is **not controlled** by your medicines
- Nausea or vomiting that keeps you from keeping down fluids or medicine
- **Unable to urinate** for 8 hours after surgery
- **Black or tarry stools**, vomiting blood, or bleeding that won't stop
- **Foot that is numb, tingling, cold, or pale** and doesn't improve after loosening the brace and wrap

911
EMERGENCY

CALL 911

- **Chest pain**
- **Shortness of breath** or trouble breathing
- Coughing up blood
- Fainting or passing out
- **Very sleepy, hard to wake up, or slow or shallow breathing** (possible narcotic overdose)
- Swelling of the face, lips, or throat, or a widespread rash (allergic reaction)

Don't see an answer to your question here?

Call our office at **(425) 656-5060**, day or night
Learn more at **merrittsurgery.com**

Frequently Asked Questions

How much weight can I put on my leg?

None, strictly, **through 6 weeks**. Not even a toe-touch. Keep the surgery foot off the floor and use your crutches for every step. We'll tell you when to start adding weight after that.

When do I need the brace?

All the time, locked fully straight, including sleep. Take it off only for the face-down exercises your therapist teaches you and for washing. It holds your shin forward so gravity can't pull on the graft.

Why is everything done face-down?

When you lie on your back and bend your knee, gravity pulls the shin bone backward and stretches the new PCL. Face-down, gravity pulls the shin forward instead, which protects the graft. That is also why a pillow goes under your calf, not your knee.

When can I shower?

Starting **48 hours after surgery**. Sit on a shower chair and keep the leg straight out in front of you, with the calf supported. Have someone help you take off the brace and ACE wrap, and leave the Steri-Strips on. **Keep the incisions covered** with plastic wrap or a waterproof cover until your PA visit. Pat the knee dry, put dry gauze on if needed, and put the brace back on, locked. **No baths, pools, or hot tubs for 4 weeks**.

Do I need stitches out?

No. All of your stitches dissolve on their own, and the Steri-Strips fall off by themselves. Nothing needs to be removed.

How do I do stairs on crutches?

"Up with the good, down with the bad." Going up, step up with your good leg first, then bring the crutches up. Going down, put the crutches down first, then step down with your good leg. Keep the surgery foot off the step. Use a handrail whenever there is one. Many people find it easier and safer to go up and down on their bottom, leg straight, for the first few weeks.

When can I drive?

Later than after most knee surgeries, because of the no-weight period and the brace. **Right knee:** not until you are off crutches, out of the brace, off all narcotic pain medicine, and able to brake hard, usually 12 weeks or later. **Left knee (automatic car):** usually 2 to 4 weeks. You must be off all narcotic pain medicine. It is not up to your surgical team to release you. The rule is that you must be a safe, unimpaired driver.

Can I travel or fly?

Long car rides and flights raise the risk of blood clots, especially while you can't put weight on the leg. Avoid them in the first two weeks. If you must travel, do ankle pumps often, get up on your crutches every hour, and keep taking your aspirin. Please let us know before you go.

How do I get a refill?

Call **(425) 656-5060** during business hours, Monday through Friday, a day or two before you run out. Narcotic pain medicine cannot be refilled after hours or on weekends. You can also ask at your PA visit.

YOUR MEDICATION GUIDE

Sports Surgery – Limited Weight Bearing

After surgery you go home with a small team of medicines. **Each one has a specific job**, and they work best together. This guide explains what each medicine is for, how to take it, and when to stop. Your prescription labels have your exact doses. If anything here differs from your label, follow the label and call us.

Blood clots are a bigger risk than usual while your weight bearing is limited or your brace is locked. That is why your aspirin lasts a full 6 weeks.

Your Medicines at a Glance

These are my standard medicines after this surgery

Your plan may be different because of your allergies, your health history, or a different plan for pain or blood thinners (anticoagulation). If we discussed a different plan with you, follow that plan and your prescription labels.

Type	Medicine	Its job	How to take it
SWELLING	Anti-inflammatory medicine usually meloxicam (Mobic)	Calms swelling and inflammation where you had surgery, which also lowers pain.	Twice a day, with food
PAIN	Acetaminophen (Tylenol)	Works on pain in a different way than the other medicines, so together they work better with fewer side effects.	Every 8 hours
CLOTS	Aspirin 81 mg baby aspirin	Thins the blood slightly to prevent blood clots after surgery while you are less active.	Twice a day, unless you were given a different blood thinner plan
PAIN	Narcotic pain medicine usually oxycodone (or hydrocodone or Dilaudid)	Takes the edge off strong pain so you can rest, sleep, and do your exercises.	As needed
HELPER	Anti-nausea medicine ondansetron (Zofran) If prescribed	Settles nausea from anesthesia or the narcotic.	As needed
HELPER	Miralax and Senna	Treat constipation from the narcotic, if it happens.	Only if constipated
HELPER	Omeprazole 20 mg Prilosec	Protects your stomach if the anti-inflammatory or aspirin upsets it.	Only if stomach upset

A Typical Day

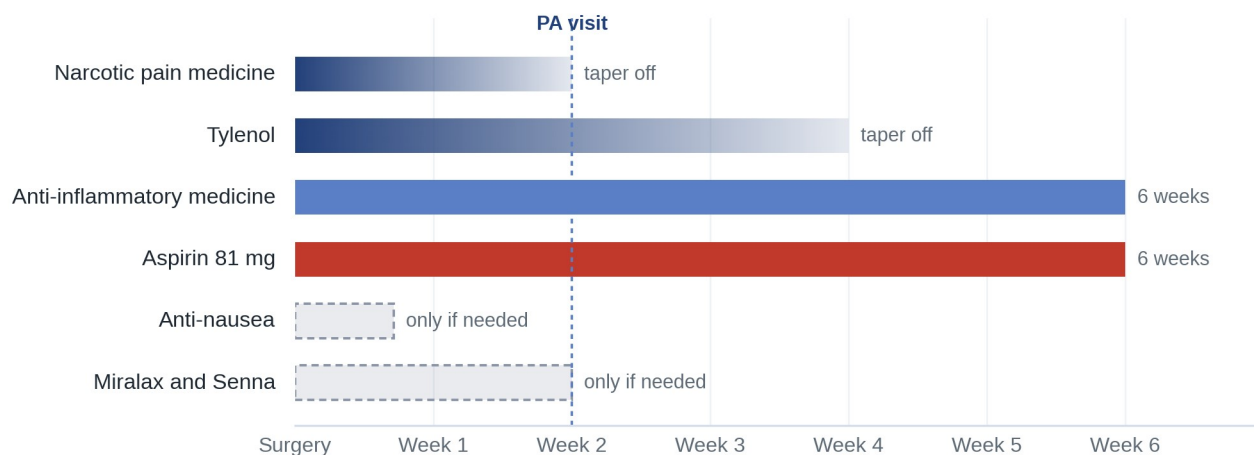
Scheduled medicines, spread through the day. Take the morning and bedtime doses with food or a snack.

Medicine	Morning with breakfast	Afternoon around 3 pm	Bedtime with a snack
Anti-inflammatory medicine	●		●
Acetaminophen (Tylenol)	●	●	●
Aspirin 81 mg	●		●

Only when needed: Narcotic pain medicine; Anti-nausea medicine; Miralax and Senna; Omeprazole 20 mg. Follow the label for how often.

How Long to Take Each One

Solid bars: take every day for the full time. Fading bars: taper off as you feel better. Dashed: only if needed.



Stop them in this order

- 1. Narcotic first.** Most people are off it within 1 to 2 weeks.
- 2. Tylenol next,** once your pain is manageable without it.
- 3. Aspirin and anti-inflammatory at 6 weeks.** Always finish the full aspirin course. It protects against clots while your weight bearing is limited.

Each Medicine in Detail

Anti-inflammatory medicine usually meloxicam (Mobic)

Its job: Calms swelling and inflammation where you had surgery, which also lowers pain.

How to take it: Take **twice a day** (morning and evening) **with food**, as directed on the bottle. Keep taking it for **6 weeks**, even when you feel good. We can discuss continuing it at your 6-week visit.

- **Do not add ibuprofen (Advil, Motrin) or naproxen (Aleve).** They are the same family of medicine, and taking two together raises the risk of stomach bleeding.
- Not prescribed if you are allergic to anti-inflammatories. If you already take your own anti-inflammatory, keep taking yours instead.

Acetaminophen (Tylenol)

Its job: Works on pain in a different way than the other medicines, so together they work better with fewer side effects.

How to take it: Take **1,000 mg (two 500 mg tablets) every 8 hours**. Continue until your pain is manageable without it.

- **WARNING: Never take more than 3,000 mg of acetaminophen in a day from all sources combined.** Too much can seriously damage your liver.
- Some narcotic pills (such as Norco or Percocet) and many cold and flu medicines also contain acetaminophen. If yours does, it counts toward the 3,000 mg. We usually prescribe plain oxycodone for this reason. If you are not sure, ask your pharmacist or call us.

Aspirin 81 mg baby aspirin

Its job: Thins the blood slightly to prevent blood clots after surgery while you are less active.

How to take it: Unless we have discussed a different blood thinner plan with you, take **1 tablet twice a day** (morning and evening) for **6 weeks**. Finish the whole course, even if you feel great.

- **Some patients get a different blood thinner instead of aspirin**, for example if you already take one (such as Eliquis, Xarelto, or warfarin) or need a stronger one after surgery. If we have discussed a different plan with you, follow that plan instead of these aspirin instructions, and do not take aspirin on top of it unless we tell you to.
- If it upsets your stomach, take omeprazole (below).

Narcotic pain medicine usually oxycodone (or hydrocodone or Dilaudid)

Its job: Takes the edge off strong pain so you can rest, sleep, and do your exercises.

How to take it: Take as directed on the bottle, **only as needed** for pain. Use the lowest dose that keeps your pain around 6 out of 10.

- **Do not drive**, drink alcohol, or take sleeping pills or anxiety medicine (like Ambien or Xanax) while taking it.
- It causes constipation. See Miralax and Senna below.
- **This is the first medicine to stop.** See "Stop them in this order" on page 2 for how long most people need it.
- Store it out of reach, and take any leftovers to a pharmacy drop box when you are done.

Anti-nausea medicine ondansetron (Zofran)

If prescribed

Its job: Settles nausea from anesthesia or the narcotic.

How to take it: Take as directed, **only as needed** for nausea. The dissolving tablet goes on your tongue if you can't keep pills down.

Miralax and Senna (over the counter)

Its job: Treat constipation from the narcotic, if it happens.

How to take it: Only if you become constipated. Start with Senna, and add Miralax if you still need it. Follow the package directions, and see the constipation steps in your post-op packet. Stop when you stop the narcotic.

Omeprazole 20 mg (over the counter) Prilosec

Its job: Protects your stomach if the anti-inflammatory or aspirin upsets it.

How to take it: Only if you get an upset stomach or heartburn: take 1 capsule once a day, 30 minutes before breakfast.

- If you already take a stomach medicine (Prilosec, Nexium, Protonix, Pepcid), keep taking yours instead.

Questions about your medicines?

Call our office at **(425) 656-5060**, day or night.

Refills: call during business hours, a day or two before you run out.

Call 911 for trouble breathing, or swelling of the face, lips, or throat after taking a medicine.