

PATELLA FRACTURE REPAIR (COMMINUTED)

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	Full weight as tolerated with the brace locked straight. Crutches as needed
BRACE	Locked straight at all times for 2 weeks, then locked for walking and sleep until 6 weeks
BENDING	None for the first 2 weeks. Bending starts after your PA visit
KEY RULE	Keep the knee straight. No bending exercises yet
PHYSICAL THERAPY	Starts 5 to 7 days after surgery, 2 times a week
SHOWERING	After 48 hours , incision covered until your PA visit. No baths or pools for 4 weeks
FOLLOW-UP	Your PA visit at 2 weeks
QUESTIONS	(425) 656-5060 , day or night

What We Did

Your kneecap (patella) works like a pulley for the big muscle on the front of your thigh (the quad). It is a key part of how you straighten your knee. Yours was broken into **several pieces** (a comminuted fracture). We **put the pieces back together and held them with hardware** (screws, wires, mesh, or strong sutures).

This kind of repair needs extra protection. You can walk on the leg with the brace locked straight, but **bending** stresses the repair. So for 2 weeks the knee stays **fully straight** while the bone starts to knit. Bending starts slowly after your PA visit.

Your three jobs for the next two weeks

- **Protect the repair.** Brace locked straight at all times, day and night. No bending the knee.
- **Keep the knee fully straight.** Rest with a pillow under your calf, never under your knee.
- **Wake up your quad** (the big muscle on the front of your thigh). Ice, elevation, and hourly quad squeezes turn it back on.

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 brace locked.

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.

- **Keep the brace locked straight** today, including in bed.
- **Elevate the leg** on a pillow **under your calf**, not under your knee.
- **Ice right away.** Unbuckle the brace and put the ice machine pad directly over the ACE wrap. The dressing protects your skin. Use it **20 minutes on, 20 minutes off**.
- **Avoid sitting with your leg down or walking too much** today. Both increase swelling and pain.
- **Your leg will feel heavy.** Have someone help you move it, or loop a towel around your heel to lift it.
- **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
- ☐ Ice machine on, leg elevated on a pillow under the calf
- ☐ Ankle pumps done
- ☐ Brace on and locked straight for sleep
- ☐ Crutches next to the bed

DAY 1

The Day After Surgery

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

1 Remove the bulky dressing

Lie down with the leg straight. Undo the brace straps and remove the ACE wrap. **Save the ACE wrap.** Under it are gauze pads. Some dried blood on the gauze is normal. Throw the gauze away. Your incision is closed with **dissolving stitches** under the skin and sealed with **skin glue** on top. **Leave the glue alone.** It peels off on its own over a few weeks, and nothing needs to be removed. After today, cover the incision with a **clean, dry gauze pad** 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 the incision is actively dripping, call **(425) 656-5060**.

2 Refit the brace

Put the brace back on, **locked 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 or hinge rubs on the incision, wrap the ACE wrap between your skin and the brace.

No bending for 2 weeks

Do not do any bending exercises for the first 2 weeks, and don't let the leg hang off the edge of the bed or a chair. Whenever the brace is off, for showering or dressing changes, keep the leg out straight and supported. Your therapist will start bending once we give the go-ahead at your PA visit.

3 Wake up your quad

- **Quad sets:** With your leg straight, tighten the muscle on the front of your thigh by pushing the back of your knee down. Hold 6 to 10 seconds, then relax. Do sets of 10 to 15, **every hour you are awake**.
- **Electrical stimulation (NMES):** A small device that makes the quad muscle contract. Your therapist will start it at PT and provides it there, so you don't need a home unit.
- **Straight-leg raises:** once your quad can hold the knee straight, lift the leg 6 to 12 inches with the brace locked and hold.
- **No kicking the leg straight** against resistance, and no leg-extension exercises.

DAYS 2–7

The Rest of the First Week

Goal: Repair protected, knee straight, quad firing, PT started.

- **Brace locked straight** at all times, including sleep.
- **No bending.** Keep the knee fully straight. No pillow under the knee.
- **Quad sets every hour** you are awake.
- **Start physical therapy 5 to 7 days** after surgery. Bring your PT prescription and protocol. Early PT focuses on your quad, your hip, and swelling. Your therapist may gently move the kneecap upward. Don't try this on your own unless you are shown.
- **Shower starting 48 hours after surgery**, with the incision covered until your PA visit. 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.
- **Walk with the brace locked** and crutches as needed, short trips around the house. Rest with the leg elevated in between.
- **Start cutting back the narcotic pain medicine** as the pain allows. See your Medication Guide.

WEEK 2

Until Your PA Visit

Goal: Knee straight, a stronger quad, safe walking.

- **Still no bending** until your PA visit. Feeling better is not a sign the bone is ready.
- **After your PA visit:** if the incision has healed, bending starts at **0 to 50°**, at home (lying down or sitting) and at PT. From about week 4 it adds about **10° a week**, reaching 90° around 8 to 9 weeks.
- **The brace stays locked straight** for walking and sleep until your 6-week visit.
- **Crutches:** use them as long as you need them for balance.

- **School or desk work:** most people are ready about 2 weeks after surgery, with the leg up and the brace locked.
- **Keep going to PT** and doing your home exercises.

Your PA visit at 2 weeks

We will check your incision and your quad, review how PT is going, and give the go-ahead to **start bending**. 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?

Full weight, as much as is comfortable, **as long as the brace is locked straight**. Crutches are for comfort and balance. Stop using them when you feel steady. Never put weight on the leg with the knee bent.

Do I really have to sleep in the brace?

Yes, locked straight, for the first 6 weeks. People bend their knees in their sleep without knowing it. For the first 2 weeks, take it off only for showering and dressing changes, with the leg kept straight.

How far can I bend my knee?

Not at all for the first 2 weeks. After your PA visit, you start with 0 to 50°, lying down or sitting, at home and at PT. From about week 4, you add 10° a week, reaching 90° around 8 to 9 weeks. Your therapist will follow the exact schedule. Don't push past the weekly limit, even if it feels easy.

When can I shower?

Starting **48 hours after surgery**. Until your PA visit, cover the incision with a waterproof bandage or plastic wrap taped at the edges, and sit on a shower chair with the leg out straight and supported. You can take the brace off while seated, but **keep the knee straight and put the brace back on before you stand**. Pat the incision dry if it gets wet. **No baths, pools, or hot tubs for 4 weeks**, until the incision is fully healed.

Do I need stitches out?

No. All of your stitches are under the skin and dissolve on their own. The skin glue peels off by itself over a few weeks. Nothing needs to be removed.

How do I do stairs?

"Up with the good, down with the bad." Going up, step up with your non-surgery leg first, then bring the crutches and surgery leg up. Going down, put the crutches and surgery leg down first, then step down with your good leg. The brace stays locked. Use a handrail whenever there is one.

Will the hardware stay in?

It can stay in for life. It sits just under the skin on the front of the kneecap, so kneeling can be uncomfortable. About 20 to 40% of people choose to have it removed, usually a year or more after surgery once the bone is fully healed. It is a short outpatient surgery.

When can I drive?

Left knee (automatic car): often 1 to 2 weeks, once you are off all narcotic pain medicine. **Right knee:** not before 6 weeks, usually about 6 to 8 weeks. You must be **off crutches, with the brace unlocked or off, off all narcotic pain medicine, and able to brake hard**. There is no set date, and it is not up to your surgical team to release you. The rule is that you must be a safe, unimpaired driver.

When can I go back to school or work?

Desk work or school usually about 2 weeks after surgery, if you can keep the leg up. Jobs that involve standing, walking, kneeling, or lifting take longer, and we'll plan that together at your visits.

Can I travel or fly?

Long car rides and flights raise the risk of blood clots. Avoid them in the first two weeks. If you must travel, get up and walk every hour, do ankle pumps often, keep taking your aspirin, and 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

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.

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

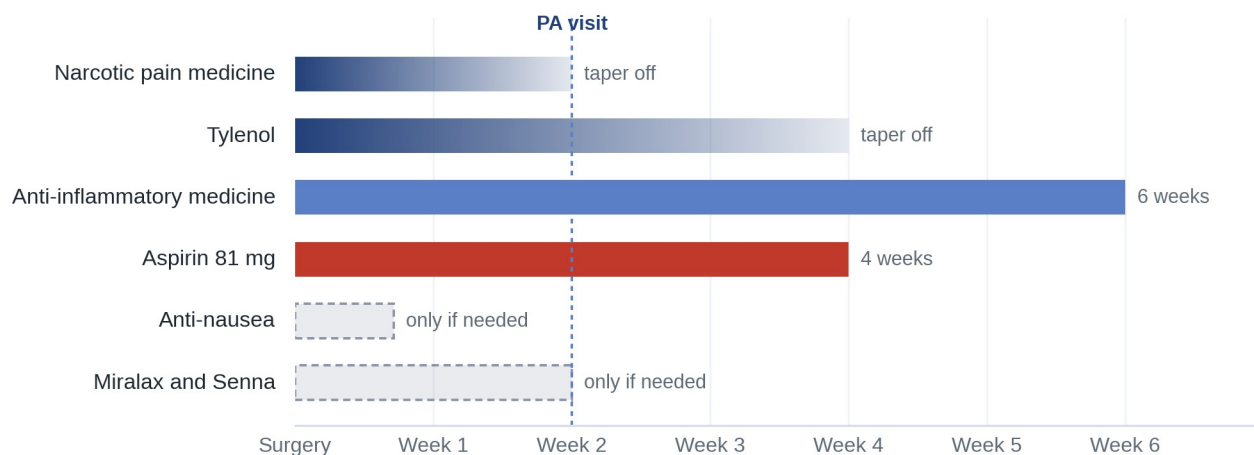
Scheduled medicines, spread through the day. Take the morning and bedtime doses with food or a snack.

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 at 4 weeks. Always finish the full course.** It protects against clots, not pain, so how you feel doesn't matter.
- 4. Anti-inflammatory last, at 6 weeks.** We can discuss more at that visit.

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 **4 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.