

Anterior Cruciate Ligament (ACL) Reconstruction

Day of Surgery

Rest on the day of surgery. The main goal on the day of surgery is to **prevent swelling and pain** and proactively start the recovery process. **Icing and elevation are the two best methods** to achieve these early goals. When lying in bed or on the couch, put a pillow under the calf so that the knee stays straight (not a pillow under the knee that causes the knee to bend). The brace can be unbuckled and the Ice Machine can then be applied to the knee directly over the ACE wrap. The ACE wrap and bandage provide a barrier for the Ice Machine cuff and so that it can be left on for hours without risk of frostbite. **Avoid sitting with your leg down or walking too much** the first day as these will increase swelling and pain.

The second goal of your early recovery is to **make sure the leg can easily straighten**. To do this, keep support under the calf with a pillow as you elevate the leg to ensure that the knee is forced straight. When resting, your leg should remain in this position.

After surgery your leg will feel very heavy. Have someone help you move around or use a towel around your heel to support the leg when moving.

Day after Surgery

1. Remove the bulky dressing under the ACE wrap.

Undo the straps on your brace and underneath you will see the ACE wrap, which can be removed as well. Save the ACE wrap. Next you will see some gauze pads that may or may not have some dried blood. If there is dried blood and the gauze is discolored, that is normal. If the gauze is saturated wet or an incision is actively draining call our office at (425) 656-5060; this is very unlikely. Please remove the gauze and throw it away. This will uncover the incision and a set of small tape strips on the skin called Steri-Strips. The Steri-Strips are to remain in place until they fall off on their own usually around 2-4 weeks after surgery. As they fall off you do not need to re-cover the incisions. There should be no need for Band-Aids or other home dressings and do not put any cream or ointments on the incisions or skin around the knee until 4 weeks after surgery.



2. Replace and Adjust the Brace. Once the bandage has been removed, you may now reapply the brace. If the brace straps or hinges are rubbing on an incision you may reapply the ACE wrap between the skin and brace to decrease friction. The brace will often be loose because the swelling is down and the gauze has been removed. The straps are adjustable and you will need to undo the Velcro and shorten the straps to tighten brace. Also, with the bulky dressing off, the ice machine will work more effectively.

Sleeping: When sleeping, you can take the brace off but keep it by your bedside because you will need to put it on when you get up. Many patients feel more comfortable with the stability of the brace when they are sleeping and this is perfectly fine.

3. Start working on knee range of motion. To work on knee range of motion you may remove the brace and you can start to bend the knee using the following technique:

- Lie in bed on your back and take the brace off
- Use your hands to start bending the knee by pulling your thigh up with your hands, and allow your heel to drag along the bed. Then use your hands or a towel to pull your shin gently towards your thigh. You will feel some pressure in the knee and this is ok, but there is no need to force the leg back too much. Use common sense. The goal is to get past 90 degrees of flexion in the first 4 days. Swelling will make flexion more difficult
- To straighten your leg back out, use your other leg under the heel to slowly extend under control. Repeat the knee flexion exercises multiple times a day
- When not doing exercises, ice and elevate the leg and work on extension. The two positions for the knee are out straight or working on range of motion. Although the most comfortable position is "slightly bent" or with a pillow UNDER the knee, avoid this position. Either keep the leg straight or work on motion.

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Day after Surgery (Cont'd)

4. Quadriceps muscle activation and strength.

Getting your quadriceps strength back after surgery is important. The quad exercises after surgery include "quad sets" and "straight leg raises."

Quad Sets: With the leg straight try to tighten and contract your quads. This is accomplished by attempting to straighten your leg as much as possible and pushing the back of the knee into the ground. You should feel the muscles on the front of your thigh contract. Try this on your non-operative leg to get a sense of what contracting your quads feels like. When you contract the quads, hold for 6-10 seconds and then relax. Repeat frequently throughout the day in sets of 10.

Straight leg raises: With your leg straight, try and lift the leg straight up in the air about 6 -12 inches. You might not be able to at first, but over time your strength will return and you will be able to fully complete this exercise. Hold for 10 seconds and repeat at first, this exercise is easiest with the brace locking your leg straight, but as you gain strength, this exercise can be done without the brace.

Post-Op Day Two until Next Clinic Visit

The goals during this time are:

1. Continue to work on getting the knee straight and good range of motion using the above technique
2. Continue to work on quadriceps activation by doing frequent quad sets and straight leg raises
3. Attend physical therapy and work on their modalities and exercises

Frequently Asked Questions

Weight-bearing: You can put your full weight on the operative leg, but initially, you will need crutches along with the brace. You must use crutches until your physical therapist clears you to walk without them. This will be when your quads are strong and stable, so your knee will not collapse. Permission to walk without crutches typically happens between a couple of days to a couple of weeks

Physical therapy: Appointments should begin between 1 and 5 days after surgery. You will be given a prescription outlining the physical therapy that you need. Your physical therapist will be in direct communication with your physician regarding your progress. Take pain medications prior to your session if you anticipate having pain with motion.

Surgical incisions/bandages: You can remove the bulky bandage the day after your surgery. The incisions may drain a little, but you can place gauze over the top with the ACE wrap if needed. The ACE wrap can help provide a barrier between your skin and the brace. Do not apply any lotions or creams to the knee until at least 4 weeks after surgery.

Showering: You may shower 48 hours after surgery. Remove your brace and ACE wrap, but leave the steri strips intact. Allow the soapy water to flow over the surgical knee but do not scrub the knee. Do not submerge the knee in a bath, pool, or hot tub until 4 weeks after surgery. To dry, blot the knee thoroughly, then reapply the brace - either with or without the ACE wrap.

Brace: The brace is needed at all times when walking or standing. The brace will be locked with your knee fully straight until your first PT visit. This is to help protect your quads as they wake up from surgery. You do not need the brace on for range of motion exercises, sleeping, PT, or when resting. You do need the brace for walking. After the first physical therapy visit, the brace can be unlocked to allow motion when you walk. The brace can be discontinued after you are off the crutches and the knee feels strong and stable. This typically occurs around 4 weeks.

Driving: If the surgery is on your right leg, it will likely take 4 to 6 weeks until you can drive. If the surgery is on your left leg, you must be off all narcotics and feel safe driving, as required by law. On either leg, there is no set timeline, and it is not up to your physician to release you to drive. You must be a safe and unimpaired driver and will have to use your best judgment in returning to the road.

Work: You may return to sedentary work/school typically 10 to 14 days after surgery. At the time of your first post-operative visit, we can collectively reassess a return to work timeframe. You will still need to ice and keep your leg elevated as much as possible to prevent swelling.

Don't see an answer to your question here?

Contact our office at (425) 656-5060

Or, visit our website: www.prolianceorthopedicassociates.com

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Medications

Here is a list of medications you will be prescribed

Aspirin: Take 1 tablet, 2 times a day with food. This medication is used as a blood thinner to prevent the formation of blood clots after surgery. Take this medication until the full course has been completed.

Narcotic Pain Medication: This is a narcotic pain medication and should be taken "as needed for pain". Please follow the frequency and dosage instructions on the bottle. After the first couple of days of acute pain, our goal is a rating of 6 out of 10 on the pain scale WITH medication. Pain is important in the healing process and "zero pain" should not be the expectation. See below for pain control techniques without medication. Narcotic medications require a hand signed, printed prescription and cannot be called into the pharmacy, so if you need a refill, please contact the office or talk with the physician assistant at your first postoperative visit.

Pain and the use of pain medications can be minimized by many proven techniques:

Ice, elevation, and anti-inflammatory medications are helpful as discussed above.

Mindfulness meditation has been proven to help with pain control. For more information, research, and guided meditations. Go to <https://mindfulness-for-pain.mindful.org>

Listening to music has been shown to lower pain levels and the need for narcotic pain medication use after surgery.

Acceptance that pain is a part of surgery and healing. The body identifies areas of pain as those areas needing blood flow and energy for healing and this is part of recovery.

Vistaril (Hydroxyzine): This is a medication that helps the narcotic work better for pain control. It can also help with muscle spasms and itching. Take as needed with pain medication. You can stop this medication when you stop the narcotic.

Anti-Inflammatory (Mobic or Naproxen): This is an anti-inflammatory medication that helps with pain and swelling. Take 1 tablet, 2 times a day with food. It is good to take this medication for as long as you have swelling or pain in the knee. You can stop taking this medication when the pain and swelling are better, but most people find it beneficial to continue use for at least 6 weeks after surgery.

Other Concerns/Questions

There may be some **bleeding and fluid leaking** from the incision site. **This is normal** after this type of surgery and may continue for 24 to 36 hours. You may change and/or reinforce the bandages as needed. **Do not remove the Steri-Strips covering the incisions** even if they are wet or bloody, they will fall off on their own.

There will be **MORE swelling on days 1-3** than there is on the day of surgery. This is also normal. The swelling will decrease with the anti-inflammatory medication, icing, and elevation. The swelling will make it more difficult to bend your knee. As the swelling goes down, range of motion will increase. It is normal to still have swelling for 6 to 12 weeks after surgery and some swelling with activity for up to a year. This is common and expected.

You may develop **swelling and bruising** that extends from your knee down to your shin and/or calf and perhaps even to your foot over the next week. Do not be alarmed. **This too is normal**, and it is due to gravity pulling the blood and fluid down the leg.

There may be some **numbness** adjacent to the incisions and on the outer side of the knee and calf. **This is common** and generally resolves but may last for 6-12 months.

It is also often normal to develop a **low-grade fever** after surgery (up to 100.5 degrees). This can last 2-5 days after surgery and often comes down with deep breathing exercises. If you have any concerns just let us know. A low grade fever early after surgery does not automatically mean you have an infection.

All incisions were closed with absorbable sutures. **There will not be any suture or staple removal required** after surgery.

Pain medication may make you constipated. Below are a few solutions to try in this order:

1. Decrease the amount of pain medication if you aren't having major pain.
2. Drink lots of decaffeinated fluids
3. Drink prune juice and/or eat dried prunes
4. Take Colace - an over the counter stool softener available at the pharmacy
5. Take Senokot - an over the counter laxative
6. Take Miralax - another over the counter stronger laxative
7. If none of the above works, call the office.

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