



ACL Reconstruction

Discharge Instructions

Comfort

- Discomfort increases 1-2 days after surgery due to the injected medication wearing off. This can be helped by oral pain medication. It is safe and normal.
- **Cold therapy** – This will greatly reduce pain and will help with swelling for the first three days.
 - You may use it 20 minutes on, 20 minutes off, as often as you wish.
 - Always keep a cloth barrier, such as a towel, between the cold and your skin.
- **Medication**
 - For **anticoagulation** – you **MUST** take one 81mg aspirin daily for two weeks first to help prevent blood clots. This is the only mandatory medication.
 - For **nausea** – Zofran (ondansetron) as needed.
 - For **constipation** – over the counter remedies such as Colace or Miralax as needed. Both the anesthesia and the pain medication can cause constipation.
 - For **pain** – A narcotic pain medication will be prescribed for you if it is deemed safe with your history and allergies. **Use only if needed.** Try to manage your pain with ice and Tylenol and use the narcotic sparingly. Some patients find they do not need the narcotic at all. Common side effects such as constipation, nausea and cognitive impairment may occur. Tylenol can be used as a step-down medication and is recommended as soon as possible.

Activity

- Full weight bearing while wearing the knee brace locked in extension is allowed immediately.
 - You may not stand or walk without the brace. Crutches may be helpful.
 - ***If you had a meniscal repair, you may only toe-touch weight bear using crutches with the brace locked in extension for 4 weeks.**
- Please restrict activity for the next several days to prevent unnecessary swelling and soreness.
 - When resting, try to keep your knee elevated above the level of your heart.
 - When sitting, we suggest ankle pumps and circles to help lower extremity circulation.
- You may “unlock” the brace to allow 90 degrees of flexion while sitting down.
- Please keep the brace on while sleeping.
- No driving until further notice. We will discuss this at your next appointment.

Wound Care

- Your incisions are covered by several absorbent pads, a cotton dressing, and an ACE wrap.
 - You may loosen the ACE wrap if it feels too tight and rewrap it, but please leave the cotton dressing and other bandages in place.
 - They were applied under sterile conditions in the OR and we want to keep bacteria away from the incision.
- No showering until after your first post-op appointment.

Diet

- You may eat anything you like, but it's advisable to choose light, easily digestible foods and to drink plenty of water the day after surgery. Some people experience nausea as a temporary reaction to anesthesia.

Call your physician if:

- You notice drainage on the cotton bandage or ACE wrap.
- You develop a temperature over 100.3 degrees.
- You have persistent pain and / or swelling in your calf.
- The knee becomes hot to the touch, red, intolerably painful, or swells suddenly. (Note some warmth, pain, and swelling are normal.)
- You have any questions or concerns. We are happy to talk to you at any time! If it is after hours, our answering service will page the PA on call and he or she will get in touch with you.

Recovery milestones:

PT will be 2-3x per week for at least 3 months, but you must do your exercises **daily**.

Overview

- Week 4 – brace is discontinued
- Week 6 – full range of motion is restored
- Month 3 – jogging in a straight line
- Month 6 – return to sport

Physical Therapy Protocol

***Same for both allograft and autograft**

***If meniscus repair, toe-touch WB only with brace locked in extension and flexion limited to 90 degrees for 4 weeks.**

The following instructions are intended for your physical therapist and should be brought to your first physical therapy visit, which should occur 1-2 days after the day of surgery.

The focus of the ACL protocol includes early weight bearing with an emphasis on proprioceptive/balance training and closed kinetic/functional rehabilitation. The following protocol and time frames are used as a guideline for rehabilitation.

Progress the patient based on their ability to perform the activities listed (not the time frames). The protocol addresses the importance of decreasing anterior tibial translation, while respecting ligamentization and tissue healing. The functional tests performed in the protocol are also used as exercises and are thus retested throughout the program.

General Information

- 1) Full weight bearing in the knee brace locked in extension is allowed immediately, **except in the case of meniscal repair—then toe touch WB only.** The brace can be discontinued four weeks post-op.
- 2) **Range of motion is limited to 90° flexion in meniscal repairs until 4 weeks post-op.**
- 3) Closed chain exercises are emphasized. No leg extension against resistance. No isokinetic exercise or Biodex testing unless specifically ordered.

PHASE I: Week 1-6

Goals: Protect graft fixation, control inflammation, minimize stiffness with ROM as tolerated

*Precautions: **Flexion limited to 90 degrees and toe-touch weightbearing for the first 4 weeks if meniscal repair was performed.** No open kinetic hamstring strengthening.*

ROM goals:

- Week 1-2: flexion to 90
- Week 2-4: flexion to 120
- Week 4-6: full flexion

Exercises

- Active-assisted leg curls
- Heel slides
- Quad sets
- Patellar Mobilization
- NWB gastric / soleus stretching
 - Begin hamstring stretches at 2 weeks
- Straight leg raises in all planes with brace locked in extension until quad is strong enough to prevent extension lag
- Quad isometrics at 60 and 90 degrees
- Partial weightbearing closed chain knee extension 0-45 degrees

PHASE II: Week 6-8

Goals: Protect graft fixation, restore normal gait, initiate closed chain exercises

Criteria to begin Phase II: No extension lag with SLR, 90 deg of flexion, full and active extension with sitting, no active inflammation

Exercises:

- Wall slides 0-45 progressing to mini-squats
- 4-way hip
- Stationary bike, beginning with high seat, low tension before progressing to single leg
- Closed chain terminal extension with resistive tubing or weight machine
- Toe raises
- Balance exercises
- Hamstring curls
- Aquatic therapy to further normalize gait
- Hamstring stretches with progression to gastrocnemius/soleus stretches

PHASE III: Week 8 – Month 6

Goals: Improve strength, endurance, and proprioception; avoid overstressing the graft

Exercises:

- Continue and progress previous exercises
- Stairmaster, avoiding hyperextension
- Elliptical
- Knee extensions 90-45 degrees, progress to eccentrics
- Advance closed kinetic chain activities
- Progress proprioception activities
- Progress aquatic program to include pool running, swimming (no breaststroke)
- After 3 months – supervised jogging in a straight line