

POST-OPERATIVE INSTRUCTIONS

ACL Reconstruction - Delayed

Dr. Adam O'Brien

MEDICATION

- You will be prescribed a narcotic pain medication with or without additional Tylenol, take as instructed and only as needed. Do not take additional Tylenol unless prescribed.
 - **Pain medication may cause constipation.** You may take an over the counter stool softener (docusate, senna, Miralax, etc) to help prevent this problem.
 - You should take these medicines with food or they may nauseate you.
 - You may not drive or operate heavy equipment while on narcotics.
 - Pain medication is refilled on an individual basis and only during office hours.
- If you have a nerve block, begin taking the pills as you feel your sensation returning to prevent a sudden onset of extreme pain (typically 6-12 hours after your surgery). **Do not wait until the block completely wears off.**
- DO NOT take any medication with ibuprofen, naproxen, or celecoxib for four weeks after surgery (this may impair tissue healing).
- Take one regular aspirin (325 mg) once a day for 14 days unless you have been prescribed Lovenox, are on another blood thinner, or have a history of stomach ulcers.
- If prescribed Lovenox or Xarelto for prevention of blood clots, begin the day AFTER surgery and finish all injections or pills.
- **Resume all home medications unless otherwise instructed.**

WOUND CARE and DRESSINGS

- Leave your white stocking and bandages on until first clinic visit
- Do not get your dressings wet. Incisions may not get wet until after your first postoperative visit. When showering (after dressings removed), let water run over the incisions and pat dry (no scrubbing). **No submersion of wounds (bath, hot tub, pool) until a minimum of 4 weeks after surgery.**
- To shower or bath with your dressing **and brace** still on, wrap the leg in a large plastic garbage bag with tape at both ends. After you remove your dressings, wrap with plastic wrap or use waterproof bandaging. Pat dry if knee gets wet.
- You may notice small spotting through your dressings, this is normal. You may place an additional bandage of this area. If it becomes saturated, it is ok to change the dressings entirely and replace them

BRUISING

- The lower leg may become swollen and bruised, which is normal and is from the fluid and blood in the knee moving down the leg. It should resolve in 10-14 days.
- **If you experience severe calf pain or swelling, call immediately (contact info).**

COLD THERAPY

- Ice should be used for comfort and swelling. Use it at least 20 minutes at a time, every hour while awake if needed. (A simple bag of peas works well as an inexpensive alternative)
- **Never apply directly to exposed skin. Place a dish-towel or t-shirt between your skin and the ice.**

WEIGHT BEARING and CRUTCHES

- Toe-touch weight bearing (or touch-down weight bearing) in locked hinged knee brace, unless otherwise specified by Dr. O'Brien
- Crutches will be needed initially for comfort unless instructed otherwise until you can walk with a normal gait (heel to toe walk).

BRACE

- **The post-operative brace must remain on and locked in full extension at all times (other than hygiene, with PT or while on CPM) until first clinic visit**
- Straps can be loosened slightly at nighttime to aid in sleeping

CPM (optional)

- The motion machine should be used **without** your brace for 4-6 hours a day in 1-2 hour increments as tolerated starting at 0-30 degrees of flexion.
- Ok to advance flexion to 60 degrees starting week 2, but no more than that until first postop visit
- **DO NOT** sleep in the machine or advance degrees of flexion until cleared by Dr. O'Brien.

DRIVING

- No driving until released to full weight bearing as tolerated and off all narcotics.

EXERCISES

- Following surgery 3 main goals exist:
 1. Full knee extension
 2. Quadriceps activation and contraction
 3. Control of pain and swelling
- To help gain full knee extension, place a small rolled up towel under your ankle and push back of knee to touch the floor by contracting your quadriceps muscle.
- **DO NOT** put pillows under the knee while you sleep.
- Elevate your leg for several days to help with swelling.
- Physical therapy should start 1-3 days after surgery. It is a good idea to arrange this prior to surgery to avoid delays in rehabilitation.

EMERGENCIES

- Please call if you notice any of the following (see contact info below):
 - Uncontrolled nausea or vomiting, suspected reaction to medication, inability to urinate, fever greater than 101.5 (low grade fevers 1-2 days after surgery are normal), severe pain not relieved by pain medication, redness or continued drainage around incisions (a small amount is normal), calf pain or severe swelling.
- **If you are having chest pain or difficulty breathing, call 911 or go to the closest emergency room.**

FOLLOW UP APPOINTMENT

- Please make your first post-op visit 7-14 days after surgery if not already scheduled.

CONTACT INFORMATION

- For surgery or prescription related questions or concerns, please contact:
 - **Monday-Friday** (8AM-5PM) – Ortho Triage Nurse at 512-509-2525 (option 1).
 - **After Hours** (M-F 5PM-8AM/weekends/holidays) – Patient Advisory Nurse at 1-800-724-7037.
- For any scheduling or appointment questions or concerns please call 512-654-6588 (M-F, 8AM-5PM).

REHABILITATION PROTOCOL

Rehabilitation after this procedure is designed for patients with ACL reconstruction that have also undergone treatment for another injury (ie, revision ACL reconstruction, multi-ligament repair/reconstruction, meniscal repair, cartilage transplant). One's protocol will be tailored to the type of surgery, but general goals/therapies are described below. \

The protocol is divided into phases. Each phase is adaptable based on the individual patients and special circumstances. Progression to the next phase is based on clinical criteria and meeting the established goals for each phase.

	Weight Bearing	Brace	ROM	Therapeutic Exercise
Phase I 0-4 Weeks	TTWB with crutches x 2 weeks, then partial (50%) weight bearing x2 weeks.	Locked in extension when ambulating Remove for exercise, with PT or with CPM (optional).	Start at 0-30°, advance weekly as follows: 0-30°, 0-60°, 0-90°. Do not advance past 90° until after week 4. Patellar mobility starting 2 weeks	Quad sets, SLR, SAQ, patellar mobs, heel slides, calf raises, hip abduction Single leg balance, bicycling, wall squats, lateral band walks, core exercises
Phase II 4-10 Weeks	Progress to FWB, wean crutches when quad control returns. Wean HKB once FWB (6	Functional brace starting at week 6	Goal 0-125° flexion	Continue Phase I Gait training. Stationary bike at 6-8 weeks. Single leg leg-press, mini-squats at 6 weeks, 2-legged

	weeks)			balance and proprioception
Phase III 10-16 Weeks	FWB	Functional brace	Full ROM	Start walking treadmill as tolerated, progress isokinetic and proprioception, begin plyometric drills.
Phase IV 4-8 Months	FWB	Functional brace	Full ROM	Progressive plyometrics, lateral movement, add hamstring curls. Start swimming, advance to jogging on treadmill ~6 months.
Phase V 8+ Months	FWB	Functional brace	Full ROM	Increase strengthening, progress jogging, biking and interval sprints Sport specific drills (non-contact) Sports metrics testing ~9 months

CRITERIA FOR RETURN TO PLAY:

- Minimal pain with activity
- >75/100 on ACL-RSI survey
- Quad and Hamstring strength \geq 90% normal
- 90% normal on single-leg hop test



- 95% normal on figure of 8, 5-10-5 Pro-Agility, and single-leg vertical jump
- Physician approval