

ACL REHABILITATION GUIDELINES

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This protocol is a guideline for post-operative rehabilitation of patients who underwent ACL reconstruction using auto/allograft patella tendon. The protocol may be adjusted according to patient progress. Please notify me with any questions or deviations from the schedule.

The following are the MAJOR OBJECTIVES of the rehab program:

1. Full extension should be reached as soon as possible.
2. Full flexion should be reached by the end of 6 weeks.
3. Full resisted extension is allowed at 6 weeks post-surgery.
4. Must use brace for full 6 weeks. It must remain locked while ambulating for the first 4 weeks. The brace may be unlocked for weeks 5 and 6 but should block flexion beyond 90 degrees.
5. Isokinetic testing at 3 months and 6 months.
6. No flexion > 90 degrees for 4 weeks

Day 1

- Full weight bearing as tolerated with brace locked in extension and crutches.
- Remain in bed with leg elevated as much as possible.
- Use ice/cooling system.
- Start Quad sets. Hold for 6 seconds, 30 reps, 4 times/day.

Week 1

- Start PROM and Gentle AROM with goal to be 0-90 by 7-10 days.
- Remove brace 3 times/day to focus on extension. Place heel on pillow and allow knee to hang free. Keep knee straight.
- Continue Quad Sets.
- May begin Straight Leg Raises with brace locked only if you can keep knee straight. Perform 20 reps, 3 times/day.
- Remove dressing on post-operative day 3. Apply band aids over incision.
- Begin Patella Mobilization- move kneecap up/down, and side/side.

Week 2

- Begin formal physical therapy program.
- ROM goal 0-90
- Begin supine wall slides, heel slides, and AAROM to increase knee flexion. Do not exceed 90 degree of flexion.

- Initiate prone hangs if full extension not obtained
- Start Straight Leg Raises and 4 Way Leg Raises. Knee must be locked in extension.
- Begin standing hamstrings curls through ROM.
- Begin bilateral bridging and progress to unilateral bridging.
- Use modalities to control inflammation.
- Use electrical stimulation for quadriceps facilitation.

Week 3-6

- Begin Gentle PROM and AROM beyond 90 degrees of flexion at week 4. By week 6, patient should have near symmetric ROM.
- At week 4, begin Closed Chain Exercises with flexion less than 90 degrees
 - o ¼ squats, wall squats < 45 degrees, etc.
- Start aerobic exercises as tolerated: bole, treadmill walking.
- Begin manual resistance for hamstrings and quadriceps. Full ROM on hamstrings, quad 90-30.
- Continue electric stimulation to quadriceps.
- Begin proprioceptive training as quad tone allows.
- Discontinue crutches at 4 weeks when gait improves.

Week 6-12

- May ambulate without brace.
- Begin full extension with resistance.
- Continue manual resistance through full ROM.
- Initiate isokinetic exercises if available.
- Functional brace to be ordered week 8.
- When functional brace in place, may begin jogging in treadmill as well as slide board exercises.

Months 3-6

- Isokinetic testing as 3 months (90-180-300 degrees/sec)
- If operated leg > 75% contra-lateral leg @ 180, may start functional training.
- At 5 months, start sports specific training.
- At month 6, second isokinetic test. May return to sport if > 90% contra- lateral leg