



Mid-America Orthopedics

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ACL Rehab Protocol

Pre-Op

- Physical Therapy 2 weeks prior to surgery, insure full ROM, increase quad/hamstring strength, normalize gait
- Schedule a doctor visit for 7 – 10 days after surgery
- Schedule a PT visit for 2-3 days after surgery

Week 1 Ankle pumps every hour

- Post –op brace to maintain full extension.
- Quad sets & SLR (Brace on) with no lag
- 50% PWB to WBAT with crutches
- Ice or Cryocuff Unit on knee for 20 – 30 minutes every hour
- Pillow or towel roll under heel passive knee extension exercise
- Passive ROM exercises only if done with therapist present (Brace off): Goal: 0 to 90 degrees.

Week 2

- Supervised PT –2- 3 times a week (may need to adjust based on insurance)
- Continue SLR's in brace, quad isometric sets, ankle pumps
- Passive knee extension with towel roll under heel
- Patellar mobilization exercises
- Brace locked in full extension for ambulation and sleeping, and may unlock for sitting. Continue to use crutches when out of home
- May remove brace for HEP, except SLR
- Flexion exercises seated AAROM
- Stationary bike for range of motion (short crank or high seat, no resistance)
- Hamstring and calf stretching
- Mini-squats and weight shifts
- Hip strengthening
- Isotonic leg press (0 – 90 degrees), heel raises
Goal: 0 – 100 degrees

Week 3

- Continue with above exercises/ice treatments
- Perform scar message aggressively

- AAROM (using good leg to assist) exercises (4-5x/ day)
- Emphasis full passive extension
- Unlock brace for ambulation if good quad control
- Progressive SLR program for quad strength with brace off if no extensor lag (otherwise keep brace on and locked) – start with 1 lb, progress 1-2 lbs per week
- D/C crutches when gait is non-antalgic
- Theraband standing terminal knee extension
- Single leg standing
- Half squats (0-40 degrees)
- Hamstring PREs
- Double leg balance on tilt boards
- Seated leg extension (90 to 40degrees) against gravity with no weight
- Add ball squats
 - Goal: 0 to 115 degrees, walking with no limp
- Add water exercises if desired (and all incisions are closed and sutures out)

Week 4

- Continue all exercises
- D/C brace IF ADEQUATE QUAD CONTROL
- Continue ROM stretching and overpressure into extension
- Initiate retro treadmill with 3% incline (for quad control)
- Wall and/or ball squats
- Heel raises
- 4-6 inch front step-ups
- Regular stationary bike if Flexion > 115
- SLR's – in all planes with weight
 - Goal: 0 to 130 degrees

Week 5

- Continue above exercises
- Self ROM 4-5x/day using other leg to provide ROM, emphasis on maintaining 0 deg passive extension
- 8 inch step ups
- 4 inch step down
- Lateral step out with therabands
- Retro treadmill progressive inclines
- Sportcord (bungee) walking
- Stair master machine
- Increase resistance on stationary bike

Week 6

- Continue above exercises
- Brisk walking

- Progress balance and board throws
- 4 inch step downs
- Swimming allowed, flutter kick only

Week 7-8

- Should have normal ROM (equal to other side)
- Bike outdoors, level surfaces only
- Start slide board
- 6-8 inch step downs

Week 10

- Begin resistance for open chain knee extension
- Plyometric leg press
- Jump down's (double stance landing)
- Progress to light running program and light sport specific drills if:
 - Quad strength > 75% contralateral side
 - Active ROM 0 to >125 degrees
 - Functional hop test >70% contralateral side
 - Swelling < 1cm at joint line
 - No pain
 - Demonstrates good control on step down

Week 11-22

- If full ROM, quad strength > 80% contralateral side, functional hop test >85% contralateral side, satisfactory clinical exam:
 - Progress to home program for running. Start backward jogging, figure of 8, zigzags and lateral shuffles. Progress to hops, jumps, cuts and sports specific drills. Begin to wean from supervised therapy.

4 – 5 months

- Criteria to return to sports
 - Full Active ROM
 - Quadriceps >90% contralateral side
 - Satisfactory clinical exam
 - Functional hop test > 90% contralateral side
 - Completion of ACL running program

One Year

- Doctor visit

This is strictly an outline of most of the major exercises that we would like to incorporate into the ACL rehabilitation. Not all exercises need to be done. Two main goals are that appropriate progress is made on a weekly basis, and that communication exists between patient, therapist and doctor.