



ACL Revision Rehabilitation Protocol

Phase 1 (0-6 weeks post-op)

Rehabilitation Goals

- Protect surgical graft
- Normal gait and stair ambulation
- ROM: full knee extension, 90° knee flexion

PRECAUTIONS

- Immobilizer with foot-flat non-weight bearing x6 weeks.
- **NO** flexion > 110 deg.
- **NO** open kinetic chain strengthening exercises
- **NO** running until 4 months post-op

Crutches

Foot-flat non-weight bearing x 6 weeks.

Brace

Locked at 0°

Wound

- Post-op dressing remains intact until post-op day #3 (~72 hours after surgery)
- May begin showering after post-op day #3 (no need to cover incision site)
- **Do NOT** submerge knee in tub or pool for 4 weeks
- Bilateral compression stockings for 3-7 days: unilateral use thereafter as needed Suture/staple removal @ 10-14 days per Ortho/PT

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Phase 1 (0-6 weeks post-op)

Rehabilitation

- Frequent use of cryocuff and/or ice with lower extremity elevated
- Begin patellar mobilizations (10 reps each direction TID) after suture/staple removal Begin scar massage after incision site sloughs/scar is formed
- Begin with the first 5 exercises below and add others gradually as tolerated Calf pumping w/ tubing
- Heel slides - assisted as needed
- Static quad sets (with estim until patient able to do 10 SLRs without extension lag)
- Supine passive extension with towel under heel (prone hangs as needed)
- Gentle hamstring stretching
- SLRs: All directions - may add light weight when pain free
- Seated ankle disk training
- UBE and/or well leg cycle

Follow-up

- Physical Therapy: Weekly
- Ortho: ~6 weeks post-op
- Supervised rehab: 2-3 x per week



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ACL Revision Rehabilitation Protocol

Phase 2 (2-4 months post-op)

Rehabilitation Goals

- Full knee ROM and minimal or no effusion
- Hop without pain using good form

PRECAUTIONS

- **NO** open kinetic chain strengthening exercises
- **NO** running until 4 months post-op*

Brace

None

Rehabilitation

- Continue phase I exercises as needed
- Progress to the following exercises and increase intensity gradually when patient is ready (i.e., no increase in knee pain or effusion since the previous exercise session)

5-8 weeks

- Stationary bike for ROM and conditioning.
- Beginning level pool exercises - primarily sagittal plane exercises (No "whip" kicking)
- General LE stretching (calf, HS, quads, HF, hip adductors)
- Neuromuscular training (BOSU squats, single leg body blade/rebounder) (progress in duration, intensity)¹
- Gait training (cone walking, marching, retrowalking, cariocas, shuffles, etc.)
- Forward, lateral, and retro step-ups (start with 2", progress as tolerated)
- Progressive strengthening (lunge, leg press, squat, RDL, etc)

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ACL Revision Rehabilitation Protocol

Phase 2 (2-4 months post-op)

9-12 weeks

- May add elliptical trainer and/or stairmaster
- Progressive strengthening (lunge, leg press, squat, RDL, etc)
- Plyometric training: shuttle jumps (double to single leg)
- Neuromuscular training (single leg RDL, star balance training, core stability)²

13-16 weeks

- Progressive strengthening (lunge, leg press, squat, RDL, etc)
- Plyometric training (shuttle jumps progressing to box jumps)^{2,3}
- Neuromuscular training (unstable surfaces single leg RDL, star balance training)^{2,3}

Testing

- Strength: single leg squat max reps
- Y-balance testing: month 3 & 4

Follow-up

- PT: Bimonthly
- Ortho: ~12 weeks post-op
- Supervised rehabilitation: 2-3 x per week as needed



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ACL Revision Rehabilitation Protocol

Phase 3 (4-9 months post-op)

Rehabilitation Goals

- Hop test and Y-balance limb symmetry > 90% 1,3

PRECAUTIONS

- **NO** participation in sports until about 1 year post-op

Brace

None

Rehabilitation

- Continue other phase II exercises as needed
- Progress in duration and intensity of exercise (no increase in knee pain or effusion since the previous exercise session)
- Progressive strengthening (lunge, leg press, squat, RDL, knee ext/flex, etc) (OKC knee extension limited to 40-90 deg range)³
- Neuromuscular and plyometric training progression² (single leg anterior and lateral jumps, tuck/box/depth jumps)
- Agility training progression (directional jogging, cariocas, shuffles, etc.)
- Progressive jogging program (increase time and/or distance no more than 10-20% per wk)

Testing

- Hop tests: month 6, then as needed until > 90% symmetry^{1,3}
- Y-balance test: month 6, then as needed until > 90% symmetry^{1,3}
- Dynamic movement quality (video analysis, LESS & single leg hop): months 5 & 6, then as needed^{1,3}

Follow-up

- PT: Monthly
- Ortho: ~6/9 months post-op
- Supervised rehab: 1-2 x per week as needed

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ACL Revision Rehabilitation Protocol

Phase 4 (9-12 months post-op)

Rehabilitation Goals

- Hop test and Y-balance limb symmetry > 90%^{1,3}
- Full return to sports/athletics without limitations

Rehabilitation

- Progress phase III exercises as needed
- Sport-specific training (as needed)



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