



ACL RECONSTRUCTION & MENISCUS REPAIR

POST-OP PROTOCOLS

Updated June 2026

Introduction

This protocol is a general guide for recovery following ACL reconstruction and/or meniscus repair surgery. After the operation, a Post-Op Summary Sheet will be provided. This sheet outlines individual instructions that may modify this protocol. It is important that this sheet is brought to the first physiotherapy appointment.

Return to sports, work, and other activities will be determined by the surgeon and physiotherapist.

For ACL reconstruction ONLY, follow timelines listed as ACL.

For ACL reconstruction WITH meniscus repair, follow timelines listed as Meniscus.

PHYSIOTHERAPY

Plan for regular physiotherapy sessions 1-2 times per week for the first 6 weeks. After that, frequency of appointments will be determined by physiotherapist based on progress.

POST-OP SAFETY

Watch for the following signs & symptoms of infection or blood clots:

- Incision redness, warmth or leaking fluid beyond 72 hours post-op
- Fever above 38.5°
- Abnormal leg redness & swelling
- Chest pain
- Trouble breathing

If any of these are present, call Dr. Urquhart's office at 902.477.6002.

Weeks 1 & 2 (0-14 Days Post-op)

GOALS

- Control swelling
- Maintain 0° extension to 90° flexion
- Minimize loss of patellar mobility
- Increase quad muscle tone

WEIGHT BEARING & RANGE OF MOTION

- 50% weight bearing with crutches
- Maximum 90° flexion

BRACE

- Start wearing brace daily once swelling decreases enough for proper fit
- Can remove brace for physiotherapy exercises as directed, showering and sleeping

EXERCISES & NOTES

- Daily ice & compression to reduce swelling
- Passive knee extension
- Heel slides to 90° as tolerated
- Quad setting with muscle stim applied to VMO
 - Straight leg raises if no VMO lag, no resistance
- Manual mobilization of patella if needed
- Ankle pumps
- Stationary biking with no resistance, wearing brace if able, do not force range
- Core activation
- Open chain hip abduction and adduction

Week 3+ (15+ Days Post-op)

GOALS

- Maintain previous goals
- Symmetrical gait pattern (ACL only)

WEIGHT BEARING & RANGE OF MOTION

- ACL only: can wean off crutches unless otherwise instructed, as long as there is no limp
 - If limping, must continue to use crutch or cane until gait improves
- Meniscus: continue 50% weight bearing with crutches

BRACE

- Start wearing brace daily once swelling decreases enough for proper fit
- Can remove brace for physiotherapy exercises as directed, showering and sleeping

EXERCISES & NOTES

- Steri-strips can be soaked off and replaced if desired
- Daily ice & compression to reduce swelling
- Continue previous exercises
- Continue passive knee extension several times per day. Do not rest with pillow under knee.
- Active assisted ROM for flexion and extension can be initiated
- Active prone knee bends
- Seated knee extensions with no weight: start with 90° - 30°, progress to 90° - 0°
- Muscle stim can be used as needed
- Pool therapy can be initiated once stitches are removed. Gentle in-water walking only, no kicking

- THIS PROTOCOL STALLS HERE FOR 3 WEEKS FOR MENISCUS REPAIRS -

ACL Week 4 / Meniscus Week 7

GOALS

- Maintain previous goals
- Normal patellar mobility
- Progress motor control & gentle muscle strengthening

WEIGHT BEARING & ROM RESTRICTIONS

- ACL only: full ROM
- Meniscus: maximum 100° flexion
- Meniscus: can wean off crutches unless otherwise instructed, as long as there is no limp
 - If limping, must continue to use crutch or cane until gait improves

BRACE

- Wear brace daily
- Can remove brace for physiotherapy exercises as directed, showering and sleeping

EXERCISES

- Continue previous exercises
- Can begin Blood Flow Restriction training as directed by physiotherapist
- Double leg calf raises with hand support for balance
- Double leg glute bridges
- Hamstring strengthening with resistance can begin as tolerated
- Cardio: gentle biking with no resistance, low speed elliptical with low resistance, or arms-only swimming (using pull buoy between knees) are permitted.

ACL Weeks 5 & 6 / Meniscus Weeks 8 & 9

GOALS

- Maintain previous goals
- No swelling
- Gradually increase flexion
- Slowly progress muscle strengthening with gradual increase in resistance (graft is still weak)
- Begin balance training

WEIGHT BEARING & ROM RESTRICTIONS

- Full weight bearing
- ACL only: full ROM
- Meniscus: gradually increase flexion

BRACE

- Wear brace daily
- Can remove brace for physiotherapy exercises as directed, showering and sleeping
- Wear brace for balance exercises

EXERCISES

- ¼ squats
- Leg press with low resistance (maximum 50% body weight) to maximum 90°
- Muscle stim used as needed
- Biking can add low resistance
- Treadmill walking at low speed with normal gait pattern
- If the knee is still tightened into flexion, focus on passive extensions with heel elevated
- Progress open chain hip abduction and adduction, prone knee bends, hip extension by adding 2-5lbs ankle weight as tolerated. Minimize loading of patellofemoral joint.
- Easy proprioceptive exercises including single leg standing.

ACL Weeks 7 & 8 / Meniscus Weeks 10 & 11

GOALS

- Maintain previous goals
- Slowly progress muscle strengthening while minimizing loading to patellofemoral joint
- Progress proprioceptive exercises

BRACE

- Wear brace daily
- Can remove brace for physiotherapy exercises as directed, showering and sleeping
- Slowly decrease brace for balance exercises
- If reaching full extension is still a problem, wear brace less. If brace has a lock, ensure it is not preventing full extension.

EXERCISES

- Progress previous exercises by increasing weights, except maximum 5lbs for quad extensions.
- Closed chain exercises: wall squats, step ups, stair climber, leg press to 90°
- Proprioceptive exercises can include wobble board, BOSU ball, single leg standing with eyes closed. Catching ball while standing on one leg can begin at week 8 (wearing brace)
- Hamstring endurance with high reps of low weight
- Single leg calf raises
- ACL only: swimming with flutter kick, straight line jogging.
- If patellofemoral or patellar tendon pain develops, or if swelling increases, reduce weights

ACL Weeks 9-12 / Meniscus Weeks 12-15

GOALS

- Maintain previous goals
- Slowly introduce straight line jogging

BRACE

- Wear brace daily
- Can remove brace for physiotherapy exercises as directed, showering and sleeping

EXERCISES

- See Return to Training Guidelines for details
- Continue to strengthen quads in closed chain
- Hamstring strengthening
- Caution with muscle strengthening, still too early to be aggressive (monitor swelling/pain)
- Ski fitter, wear brace
- Straight line jogging can begin if full ROM, strength is progressing well, swelling is minimal, and no limp
- Meniscus: can begin double leg hopping and progress to double leg jumping forward

ACL Month 4 / Meniscus Month 5

GOALS

- Maintain previous goals
- Ramp up strength training
- Plyometric training
- Running
- Eliminate apprehension to complex movements

BRACE

- Wear brace in uncontrolled environments including:
 - Snow, ice, wet floors
 - Uneven ground, grass, trails
 - Crowded events, parties
- Wear brace for running and sport specific training

EXERCISES

- See Return to Training Guidelines for details
- Training should progress from endurance to power throughout this phase
- Single leg squatting, step downs, side lunges
- Open chain quad strengthening
- Slowly progress plyometrics in the following order: double leg jumping, single leg hopping, lateral jumping
- Running on turf/grass can begin once jump symmetry reaches $\geq 85\%$
- Proprioceptive training should be sport specific
- Golf is permitted if brace is worn
- Outdoor biking is permitted if brace is worn
- Swimming can include flip turns and pushing off wall

Months 5 & 6

GOALS

- Maintain previous goals
- Sprinting
- Change of direction, pivoting, cutting
- Agility training
- Sport specific skills
- Non-contact training may be permitted based on sport and readiness

BRACE

- Wear brace in uncontrolled environments including:
 - Snow, ice, wet floors
 - Uneven ground, grass, trails
 - Crowded events, parties
- Wear brace for running and sport specific training

EXERCISES

- See Return to Training Guidelines for details
- Jump rope, lateral shuffle, cariocas
- Continue cardio: running, elliptical, swimming (flutter kick only), stair climber, ski fitter etc.

Months 7 - 9

GOALS

- Non-contact team training
- Contact training may be permitted based on sport and readiness as determined by surgeon

BRACE

- Wear brace in uncontrolled environments including:
 - Snow, ice, wet floors
 - Uneven ground, grass, trails
 - Crowded events, parties
- Wear brace for running and sport specific training

EXERCISES

- See Return to Training Guidelines for details
- Plyometrics: single leg box jumps, lateral bounds
- Agility: shuttle runs, cutting drills
- Strength training: back squats, single leg Romanian deadlifts
- Introduce reactive drills with external cues
- Progress sprinting and sport-specific conditioning

Months 10+

RETURN TO SPORT

Return to sport is determined on an individual basis by surgeon and physiotherapist, and will depend on strength, jumps, stability, psychological readiness and the nature of the sport. Strength, power, endurance and range of motion should be $\geq 95\%$ compared to other leg. Thigh and calf circumference should be within 1cm difference between legs. 1 full month of training should be completed before returning to competitive sport.

See Return to Training Guidelines for specific examples of training progressions.

JUMP TEST BATTERY

The following tests will be used to monitor progress and determine readiness for sport:

- Single leg land off step: controlled landing with no valgus collapse (symmetrical)
- Single leg jump forward: jump distance measured, stable/controlled landing
- Single leg triple jump forward: jump distance measured, stable landing
- Zig-zag ladder jumps on agility ladder: jump symmetry and pattern

Return to Training Guidelines

The following chart is a guideline to introduce return-to-sport training. Times listed are minimum starting points, but readiness to progress must be determined by therapist. Before moving to the next activity, each activity must be performed with proper technique, with no increase in pain or swelling within 24 hours. Rushing progression increases the risk, re-injury and setbacks.

| Activity | ACL | Meniscus | ACL+ Meniscus | Notes |
|---|-------|----------|------------------|--|
| GENERAL (ALL SPORTS) | | | | |
| Straight-line jogging | 6 wks | 3 mo | 3 mo | Needs full ROM, minimal swelling, no limp |
| Double-leg hopping | 3 mo | 3 mo | 3 mo | Controlled landing |
| Double-leg jumping forward | 3 mo | 3.5 mo | 3.5 mo | Symmetrical loading, stable landing with no valgus collapse |
| Single-leg hopping | 3 mo | 4 mo | 4 mo | Needs ≥75% quad strength, stable landing with no valgus collapse |
| Single-leg jumping forward | 3 mo | 4 mo | 4 mo | Stable landing with no valgus collapse |
| Lateral jumping & ladder drills | 3 mo | 4 mo | 4 mo | Needs ≥80% SL jump symmetry Stable landing with no valgus collapse |
| Running on turf/grass | 3 mo | 4 mo | 4 mo | Needs ≥85% SL jump symmetry |
| Sprinting | 4 mo | 5 mo | 5 mo | Needs ≥85% quad strength, deceleration control |
| SOCCER | | | | |
| Dribbling through cones | 3 mo | 4 mo | 4 mo | Good change-of-direction control |
| Gentle passing | 3 mo | 4 mo | 4 mo | Pain-free kicking |
| Long passing | 3 mo | 4 mo | 4 mo | Good trunk and hip control |
| Pivoting & cutting | 4 mo | 4.5 mo | 4.5 mo | Controlled cutting mechanics, very gradual progression |
| Corner kicks & shooting (stationary ball) | 4 mo | 5 mo | 5 mo | Good planting knee control, stable landing with no valgus collapse |
| Hard kicks while running | 4 mo | 5 mo | 5 mo | Dynamic knee stability |
| Non-contact pattern drills | 4 mo | 5 mo | 5 mo | Needs ≥90% SL jump symmetry. Predictable drills, start slow and increase speed, not yet sprinting |
| Non-contact team drills | 5 mo | 5 mo | 5 mo | Needs ≥90% strength |
| Contact drills | 7 mo | 6 mo | 7 mo | Needs ≥95 SL jump symmetry, ≥95% strength, and psychological readiness. Must be cleared for contact by surgeon |

| HOCKEY | | | | |
|--|-------|--------|--------|--|
| Light skating | 9 wks | 3 mo | 3 mo | Pain-free knee flexion and extension on ice |
| Crossover turning | 3 mo | 3 mo | 3 mo | Good lateral push and knee control, focus on technique rather than power |
| Skills | 3 mo | 4 mo | 4 mo | Stable skating mechanics, puck handling |
| Hard stopping & cutting Change of direction | 4 mo | 4 mo | 4 mo | Deceleration control without valgus |
| Non-contact drills | 6 mo | 6 mo | 6 mo | Needs ≥95% SL jump symmetry Small area drills |
| Contact drills & hitting | 7 mo | 6 mo | 7 mo | Needs ≥95% SL jump symmetry, ≥95% strength, and psychological readiness. Must be cleared for contact by surgeon |
| VOLLEYBALL | | | | |
| Change of direction | 3 mo | 4 mo | 4 mo | Lateral stability during cutting |
| Deep squatting & lunging | 4 mo | 5 mo | 5 mo | Needs full pain-free ROM |
| Diving | 6 mo | 5 mo | 6 mo | Tolerates impact with no pain or swelling |
| Team training | 6 mo | 5–6 mo | 6 mo | Needs ≥90% SL jump distance, stable landing with no valgus collapse |
| BASKETBALL | | | | |
| Stationary shooting & passing | 6 wks | 7 wks | 7 wks | Needs pain-free ¼ squat No jumping |
| Dribbling | 6 wks | 9 wks | 9 wks | Walking to jogging speed |
| Cutting & pivoting | 4 mo | 4.5 mo | 4.5 mo | Needs ≥90% SL jump distance |
| Non-contact drills | 6 mo | 5 mo | 6 mo | Needs ≥90% strength |
| Contact drills | 7 mo | 6 mo | 7 mo | Needs ≥95 SL jump distance, ≥95% strength, and psychological readiness. Must be cleared for contact by surgeon |
| SWIMMING | | | | |
| Pull only | 3 wks | 3 wks | 3 wks | Incisions healed, no kicking yet. |
| In-water jogging | 3 wks | 6 wks | 6 wks | |
| Flutter kick | 6 wks | 12 wks | 12 wks | |
| Flip turns & pushing off | 3 mo | 4 mo | 4 mo | Needs full pain-free ROM |
| Jumping & diving | 4 mo | 4 mo | 4 mo | |
| Whip kick & eggbeater | 4 mo | 5 mo | 5 mo | No joint irritation |