

Protocol: Non-Operative ACL Injury Rehabilitation

Disclaimer & Your First Step: This protocol is a powerful educational tool outlining the journey of non-operative ACL recovery. However, it is not a substitute for a personalised rehabilitation plan from a qualified physiotherapist. A successful outcome relies on a program built specifically for your knee, your functional goals, and your life's demands. At Peninsula Physio and Rehab, our expert therapists excel at designing these evidence-based, individualised plans.

To ensure your safety and maximise your recovery potential, book a one-on-one consultation before beginning any new exercise program. Think of this document as your road map and your dedicated physiotherapist as the expert navigator for the journey ahead.

Overview:

For many individuals, a structured, non-operative rehabilitation program is a highly effective pathway to returning to an active lifestyle after an ACL injury, particularly for those not aiming to return to elite-level pivoting sports or those who wish to avoid surgery. The goal is to restore knee stability, strength, and function by training the surrounding muscles to support the joint dynamically. This journey requires dedication, but you are not on it alone. At Peninsula Physio and Rehab, we are committed to guiding you through each phase, helping you achieve every milestone with confidence. Progression through this protocol is determined by achieving specific clinical criteria, which your physiotherapist will meticulously assess.

Phase 1: Acute Management & Foundational Control (Week 0-4)

- Goals:
 - Minimise pain and swelling (effusion).
 - Restore full, pain-free knee extension ().
 - Progressively improve knee flexion.
 - Activate key stabilising muscles (quadriceps, hamstrings, glutes).
 - Normalise walking pattern on level surfaces.
- Precautions:
 - Avoid activities that cause pain or a sensation of the knee "giving way."
 - No pivoting, cutting, or jumping.
 - Weight-bear as tolerated, using crutches if needed to maintain a normal gait pattern.
- Interventions
 - Pain/Swelling Management: Cryotherapy (ice), compression, elevation, and relative rest.
 - Range of Motion: Heel slides, passive knee extension hangs, and gentle patellar mobilisations.
 - Strengthening: Isometric quadriceps, hamstring, and gluteal sets; straight leg raises (all planes); calf raises.





Phase 2: Strength & Proprioceptive Development (Week 4-8)

Criteria to Progress: Minimal pain and swelling, full active range of motion, and the ability to walk without a limp.

- · Goals:
 - Establish an excellent foundation of lower limb strength.
 - Introduce closed-chain strengthening exercises.
 - Improve proprioception (the knee's awareness in space).
 - Begin low-impact cardiovascular exercise.
- Precautions:
 - Ensure all exercises are pain-free and performed with perfect technique.
 - Focus on controlled movements; avoid sudden, uncontrolled actions.
 - · Continue to avoid pivoting and high-impact activities.
- Interventions:
 - Strengthening: Stationary cycling, bilateral exercises like mini-squats (), leg press (), hamstring curls, and bridging.
 - Neuromuscular Control: Single-leg balance on stable surfaces, weight-shifting drills.
 - Cardio: Stationary bike or elliptical trainer with comfortable resistance.

Expert Guidance from Peninsula Physio & Rehab

How do you know if you're truly ready to advance? Progressing too soon can lead to setbacks. Our therapists remove the guesswork. We use objective strength testing with our state-of-the-art AXIT system, combined with expert movement analysis, to confirm you've met the criteria. Don't guess, let us assess. Book an appointment to ensure you're right on track.

Phase 3: Dynamic Control & Functional Progression (Week 8-12+)

Criteria to Progress: No pain or instability with Phase 2 activities, good performance on strength testing (e.g., >75% strength compared to the uninjured side), and confidence in your knee.

- Goals:
 - Improve lower limb strength to >85% of the contralateral side.
 - Introduce unilateral (single leg) and multi-planar movements.
 - Begin foundational power and agility work.
- Interventions:
 - Strengthening: Progress to single-leg squats, lunges in all planes, and step-ups/downs.
 - Proprioception: Single-leg balance on unstable surfaces (e.g., foam pad).
 - Introduction to Plyometrics: Double-leg exercises like box jumps onto a low box and broad jumps, focusing on soft, controlled landings.
 - Agility: Introduction to basic ladder and cone drills, focusing on controlled footwork.



Phase 4: Return to Activity & Sport Preparation (Month 3-6+)

Criteria to Progress: Successful completion of a battery of functional tests, strength >90-95% of the uninjured side, psychological readiness, and clearance from your physiotherapist.

- Goals:
 - Safely re-integrate into unrestricted, sport-specific training.
 - Develop sport-specific power, agility, and endurance.
 - Minimise the risk of future injury through ongoing, targeted conditioning.
- Interventions:
 - This final phase is entirely tailored to you and your goals. Your Peninsula Physio therapist will work closely with you to design a program that simulates the specific demands of your sport or desired activity. This may include:
 - Advanced plyometrics and agility drills.
 - A structured return-to-running program.
 - Controlled, sport-specific scenarios (e.g., cutting, decelerating, pivoting).
 - Ongoing strength and conditioning program.

Take the Next Step in Your Recovery

Alright, you've got the race plan. But every champion driver needs a world-class pit crew. Think of us as exactly that – your personal team of body mechanics, data nerds, and cheerleaders, all rolled into one. We'll handle the diagnostics and the fine-tuning so you can focus on getting back on the track. Your comeback is the only trophy we care about.

Don't leave it to chance. Contact us today to build your personalised plan.