

Sports Injury and Joint Replacement Surgery for the Hip and Knee

PCL REHABILITATION PROTOCOL

General Guidelines

- PCL reconstructions are usually performed on day-only basis or 1 night in-patient stay
- Supervised physical therapy commences immediately post-operatively. Patients should see their physical therapist as soon as practically possible. Supervised therapy continues for 6-12 months
- Braces are routinely used when the PCL is reconstructed or the meniscus is repaired
- Dr Awwad may alter time frames when indicated.

White compression stockings

You may stop wearing the white compression stockings after 24-48 hours. This compression stocking helps prevent a blood clot from forming in your legs. Once you are walking frequently you will no longer need the stocking. If you develop lower leg swelling, tenderness, and/or redness, please contact Dr Awwad's office or the hospital.

Dressings

The bulky encircling dressings (crepe bandage, velband and pads) may be removed the day after surgery. The small adhesive dressings should be left intact. To shower, cover the surgical knee and dressings with plastic cling wrap. Prior to discharge from hospital, an appointment will be made to see a nurse for a dressing change and wound check between 1-2 weeks post-operatively.

Ice and Elevation

The leg should be intermittently elevated and an ice pack used for 72 hours post-operatively to assist with swelling and pain. Ice packs should be applied for 20-30mins/hr. After 72 hrs, ice packs are no longer required, although can be safely continued and their use is very helpful for pain and swelling.

Pain Medications

The anaesthetist will individualise and organise the appropriate pain relief for patients. Commonly required medication are panadeine forte, tramadol, palexia and endone.

Precautions

Patients should contact Dr Awwad's office or the hospital the operation was performed in, if they develop high temperatures, worsening skin redness, worsening calf, knee or thigh pain and swelling and excessive bleeding or ooze from the incision sites.

Phase I - Immediately Post-Operatively to Week 2:

Modalities:

- RICE

Weightbearing Status and Brace:

- PCL brace (Jack) 0-90° locked in extension when ambulating worn 24hrs per day
- TWB with crutches

ROM:

- Prone or supine assisted Knee flexion 0-90° with proximal tibia protected against gravity
- No hyperextension
- Patella mobilisation

Exercises:

- No active hamstrings/knee flexion for 6 weeks
- Isometric quad contractions/gluteal activation (supine or standing), isometric hip adduction/abduction and ankle pumping

Phase II - Post-Operative Weeks 2 to 6:

Modalities:

- RICE

Weightbearing Status and Brace:

- PCL brace 0-90° 24hrs per day
- PWB with crutches

ROM:

- Prone or supine assisted knee flexion 0-90° with proximal tibia protected against gravity

- Patella mobilisation

Exercises:

- Same as 0-2 weeks
- Progress to mini squats 0-30° with brace on (WBAT during this exercise)
- NWB hip stability exercises: abduction, extension, ER, clam shells, supine bridging on Swiss ball
- Ankle theraband plantar flexion, sitting calf raises

Phase III - Post-Operative Weeks 6-12:

Modalities:

- RICE

Weightbearing Status and Brace:

- PCL brace
- WBAT heel toe gait

ROM:

- Full ROM
- Patella mobilisation

Exercise Suggestions:

- Gait retraining
- Quadriceps isometrics in long sitting, standing
- Weight shifting: 2 weigh scales → 50-50WB
- Leg extension (or quad over roll), active terminal knee extension with theraband
- Initiate abdominal and core strengthening
- Standing hip flexion/extension, abduction/adduction
- Shuttle/leg press
- Mini wall squats
- Calf raises

Phase IV - Post-Operative Months 3 - 6:

Weightbearing Status and Brace:

- Wean off PCL brace after 3 months as tolerated but can leave for longer if not ready
- WBAT

ROM:

- Full ROM

Exercises:

- Bike pendulums
- Supine bridging
- Hamstring curls: prone, sitting
- Core strengthening
- Progress resistance of Shuttle working on strength and endurance
- Hip strengthening
- Static Lunge
- Progress to low resistance stationary bike
- Wobble boards

- Single leg stance 30-60 seconds
- Begin Jogging/running program once have:
 - » Full ROM
 - » Quiet knee
 - » Neuromuscular control
 - » Outline
 - ◆ Week 1 : 4 min walk; 1min jog for 15-20min
 - ◆ Week 2: 3 min walk; 2 min jog for 20 min
 - ◆ Week 3: 2 min walk; 3min jog for 20 min
 - ◆ Week 4: 1 min walk; 4 min jog for 20 min

Phase V: Post-Operative Months 6+:

Weightbearing Status and Brace:

- Wean off brace

Exercise Suggestions:

- Progress leg extensions
- Shuttle standing kick backs
- Hamstring curls
- Eccentric heel drops
- Single leg stance on unstable surface
- Jogging/running as tolerated
- Agility training (figure 8's, ladder drills etc)
- Side to side steps
- Jumping, Skipping, Hopping
- Sport-specific multi-directional drills/contact when adequate core/lower extremity patterning

References:

- Fowler Kennedy Sports Medicine Clinic, London, Ontario, Canada.
- Pierce CM, O'Brien L, Griffin LW, LaPrade RF. Posterior cruciate ligament tears: functional and postoperative rehabilitation. Knee Surgery, Sports Traumatology, Arthroscopy. 2013 May;21(5):1071-84.

Do you still have a question about your recovery that has not been answered within this document?

Please contact Dr Awwad's office prior to your surgical date at: awwadadmin@orthosa.com.au

Sometimes we may miss a question that is important to you. If so, please feel free to email us your feedback so that we can improve our service to you and future patients – awwadadmin@orthosa.com.au



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APPOINTMENTS AND ENQUIRIES

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Ask **Dr Awwad** to clarify your restrictions prior to surgery to avoid disappointment.