

## Sports Injury and Joint Replacement Surgery for the Hip and Knee

# ACL AND PCL RECONSTRUCTION POST-OPERATIVE PROTOCOL

### General Guidelines

- ACL reconstructions are usually performed 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
- 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 paracetamol, tramadol, paxipar 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 - Maximum Protection (Weeks 0 to 6):

- Brace locked at 0° at all times for six weeks
- Ice and modalities to reduce pain and inflammation
- Use crutches non-weight bearing for 6 weeks.
- Range of Motion
  - » All exercises must be supervised by a physiotherapist
  - » Begin aggressive patella mobility
  - » ROM 0- 90° out of brace with no posterior draw stress
  - » No active hamstring exercises
  - » Quadriceps setting, focusing on VMO
  - » Multi-plane straight leg raising with brace on

### Phase II - Progressive Stretching and Early Strengthening (Weeks 6 to 16):

#### Weeks 6 to 12:

- Continue with modalities to control inflammation
- May begin to progressively increasing weight bearing IN
- BRACE with set on full ROM (to be worn AT ALL TIMES when weight bearing)

#### Range of Motion:

- Full knee extension (no hyperextension)
- Knee flexion to 120°, progress as tolerated

#### Exercises:

- Continue with phase I exercise
- Bilateral closed kinetic chain squatting
- Multi-plane open and closed kinetic chain hip strengthening
- Step-up progression
- Stationary biking
- Pool program; focus on ROM
- Proprioception drills

Weeks 12 to 16:

Range of Motion:

- Full knee flexion and extension

Exercises:

- Advance strengthening program progressing to unilateral as tolerated
- Increase intensity of stationary bike program, may add treadmill walking
- Advance intensity of pool program; focus on strengthening.

### Phase III - Advanced Strengthening and Proprioception Phase (Weeks 16 to 20):

Range of Motion:

- Full knee flexion and extension with terminal stretch

Exercises:

- Advance cardiovascular program; no running
- Increase intensity of closed kinetic chain exercises
- Advance proprioception drills
- Initiate gym strengthening progressing from bilateral to unilateral as tolerated
- Leg press, squats, partial lunges, hamstring curls, ab/adduction, calf raises
- Increase intensity of bike and walking program, may add elliptical trainer
- May begin a pool running program

### Phase IV - Advance Strengthening and Plyometric Drill Phase (Weeks 20 to 24):

Exercises:

- Implement a full gym strengthening program; including leg extensions at 30° - 0°
- Begin straight plane running
- Begin controlled lateral functional cord drills

### Phase V: Return to Sport and Functional Drills Phase (Weeks 24 to 32):

Weeks 24 to 28:

- Continue with aggressive lower extremity strengthening, cardiovascular training, and flexibility
- Implement multidirectional agility drills
- Begin plyometric drills from bilateral to unilateral as tolerated

Weeks 28 to 32:

- Follow-up examination with the physician
- Brace fitting for functional knee brace
- Sports test for return to competition aiming for 2 weeks post-operatively

### 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](mailto: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](mailto: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.