

POST OPERATIVE PROTOCOL

Femoral Condyle Osteochondral Defect Repair Rehabilitation Protocol

General Guidelines

- 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 panadeine forte, tramadol, paxia 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-op to week 6

Goal

- Full passive knee extension to 0°
- Full passive knee flexion to 120°
- Minimal pain and swelling
- Voluntary quadriceps control 4-5 -
- Ambulating partial weight bearing (PWB) by week 4
- Normalised gait pattern in the pool treatment
- Brace locked at 0° during weight bearing
- Sleep in locked brace for 2-4 weeks

Weight bearing

- Non Weight bearing for 1-2 weeks
- Touch Toe Weight Bearing (20-30lbs) week 2-3 or sooner with MD approval
- Partial Weight Bearing (25% of body weight) at week 4-5

Exercises

- Patellar mobilisation daily
- Full passive knee extension immediately
- Passive knee flexion 2-3 times daily
 - 0-90 by end of post op week 2
 - 0-105 at post op week 3-4
 - 0-120 by post-op week 6
- Calf and hamstring stretching
- Ankle pumps with thera-tubing
- Quad setting, Glut setting, Hamstring setting
- Multiangle isometrics (quads and hamstrings)
- Active Knee extension 90° to 40° (no resistance)
- SLR 4 directions (no resistance)
- Stationary bike when ROM permits (no resistance)

Phase II - Advanced strengthening and proprioception phase weeks 6-12

Goal

- Full ROM
- Able to walk 1-2 miles or bike 30 minutes
- Increased strength
- Hamstrings within 20% of uninvolved side, unilateral as tolerated
- Quadriceps within 30% of uninvolved side
- Balance testing within 30% of uninvolved side

Treatment

- Brace discontinued by week 6

Weight bearing

- Progress to weight bearing as tolerated
- Full weight bearing by week 8-9
- Discontinue crutches Week 8-9

Exercises

- Gradual increase in ROM
- Maintain full passive knee extension
- Progress knee flexion to 120-135° by week 8
- Continue patellar mobilisations
- Initiate mini squats 0-45° by week 8
- Closed kinetic chain exercises (leg press)
- Toe-calf raises by week 8
- Open kinetic chain knee extensions (progress 1# per week)
- Progress resistance and time on exercise bike
- Treadmill walking week 10-12
- Balance a proprioception drills
- Initiate front and lateral step ups and wall squats by week 8-10
- Continue slow steady progressions into functional activities
- Increase standing and walking tolerance

Phase III - post-op weeks 12-26

Goals

- Full ROM without pain
- Strength within 80-90% of uninvolved side
- Balance/stability within 75-80% of uninvolved side
- Functional activities without increase in any symptoms.

Exercises

- Full ROM
- Leg Press 0-90°
- Bilateral squats 0-60°
- Unilateral step-ups progressing from 2" to 8"
- Forward lunges
- Walking program
- Open kinetic chain knee extension 0-90°
- Bicycle, stairmaster, elliptical, treadmill
- Swimming
- Return to all functional activities

Initiate Home Maintenance Program (week 16-20)

- Bicycle
- Progressive walking program
- Pool program
- SLR 4 directions
- Wall squats
- Front lunges
- Step ups

Phase IV - post-op weeks 26-52

Goals

- Return to full unrestricted functional activity

Exercises

- Maintenance program 3-4 times a week
- Progress resistance to all strengthening exercises
- Progress to agility and dynamic balance drills
- Plyometric activity based on patient need
- Sports specific training.

Return to sports

- Low impact sports routinely around month 6 post-op
- Medium impact sports months 8-9 for small lesions and 9-12 for larger lesions
- High impact sports months 12-18



Dr George Awwad

Orthopaedic Surgeon
Hip, Knee, Robotics, Sports

P 08 8267 8243 F 08 8267 8278
drgeorgeawwad.com.au

