

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

# Femoral Condyle Osteochondral Defect Repair 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 the 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, bagging the knee in the brace is best. 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 and endone. The routine use of anti-inflammatories is not recommended post-operatively, unless directed by Dr Awwad.

### 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 1 (Postoperative Week 0-6)

- 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
  - Normalized gait pattern in the pool

treatment :

In 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

- Patellar mobilization 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 III - Advanced Strengthening and

goal:  
Full ROM  
Able to walk 1-2 miles or bike 30 minutes  
Increased strength  
hamstrings within 20% of uninvolved side  
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

gradual increase in ROM  
Maintain full Passive knee extension  
Progress knee flexion to 120-135°  
by week 8 Continue patellar mobilizations

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 3 - Postoperative 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.

Treatment :  
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 4 - Postoperative Week 26-52

goals:  
Return to full unrestricted functional activity

Treatment:  
Maintenance program 3-4 times a week  
Progress resistance to all strengthening exercises  
Progress to agility and dynamic balance drill  
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



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