

# HIP ARTHROSCOPY

## (Post-Operative Protocol)

Prepared for Dr. J.N. Cakic

### PLEASE NOTE!

This protocol is designed to serve as a guideline for clinicians and therapists. One should consider the pathology, extent of surgery and anticipated functional demands of each patient. Continual assessment is essential when considering patient progression. Should you have any queries or concerns, please consult with the surgeon or rehabilitation team.

### Weight bearing and ROM Guidelines

Surgery Type	Weeks	Weight Bearing	ROM
Femoro-acetabular Impingement (CAM / Pincer)	0-4	Partial (2 crutches)	Active 60 – 70% of unaffected side
	4-6	Partial to Full (1 crutch)	> 70% (to tolerance)
	> 6	Full	Full
Labral Repair	0-4	Partial (2 crutches)	Active 60 – 70% of unaffected side
	4-6	Partial to Full (1 crutch)	> 70% (to tolerance)
	> 6	Full	Full
Debridement	0-4	Partial to Full (crutches)	Full (To tolerance)
	> 4	Full	Full
Microfracture / Decompression	0-6	Toe Touching (2 crutches)	Full (To tolerance)
	6-12	Partial to Full (1 crutch)	Full
	> 12	Full	Full

### **STAGE 1** ( $\pm$ 4 - 6 weeks)

#### AIM:

Protected weight bearing stage, protect integrity of repaired tissue  
Restore range of movement within restrictions  
Maintain muscle function, preventing inhibition  
Allow tissue healing / repair

#### *RESTRICTIONS/PRECAUTIONS:*

Do not push through pain!  
Maintain ROM restrictions (Flexion limited to 90° for 1<sup>st</sup> 3 weeks)  
Maintain weight-bearing restrictions  
Minimize active abduction for the first 2 weeks  
Labral repairs are highly sensitive to active rotational activity

#### **Day 1-14**

The average in-hospital stay is one night  
Your hospital-based physiotherapist will instruct a home-based exercise programme, teach crutch walking and educate the patient on comfortable sleep positions and daily activities  
Patient will be discharged with a HOME exercise program (refer to end of protocol)  
Commence outpatient treatment 7-10 days following surgery  
Introduce stretching, core stabilization and correct GAIT patterning

**Physiotherapy:**

Passive and active hip mobilization

Restore normal gait pattern (as per weight bearing restrictions)

Patient education – including day-to-day daily activity

Soft tissue mobilization – hip, thigh and lumbar spine (include spinal mobilization)

Commence stretching (within ROM guidelines) - quadriceps, calves, hamstrings, adductors

Initiate core muscle exercises (bed, mat programme)

Commence gluteal activation (bed, mat programme)

Commence stationary cycling with NO resistance. Raise the seat to prevent hip flexion > 90°

**2 - 6 Weeks**

Continue with Day 1-14 physiotherapy

Continue / advance weight bearing & ROM (as per guidelines)

Continue isometrics as per home exercise programme (if required)

Introduce / progress CKC activity

Continue / advance gluteal exercises

*NOTE: many of the short lever activities require large degrees of hip rotation; this may aggravate labral involvement. Long lever activities may decrease this excess rotational movement*

Continue stretching

Commence deep tissue massage around the arthroscopy incisions from 4 weeks

Increase cycling activity (no interval training OR spinning)

Increase core stability exercises (may introduce Pilates ball – respect the limitations of the patient's function)

Introduce proprioception drills (refer to weight bearing guidelines)

*Optional* - Alter-G Anti-Gravity Treadmill© may be introduced

Patient may start with **swimming** exercises 5 days after sutures removed and wounds are sealed:

- Use pool float device between the legs to eliminate kicking!

- No breaststroke!

**CRITERIA TO PROGRESS TO STAGE 2:**

Achieve 70% of full ROM

No pain during full ROM or with Stage 1 exercise

Full weight bearing

Proper muscle firing patterns

No compensatory GAIT patterning

Hip Stage 1- 2 Screening ≥ 5 points (**refer to end of protocol**)

## **STAGE 2** (± 6 - 12 weeks)

### AIM:

Maintain full weight bearing  
Maintain / improve normal arthrokinematics / GAIT pattern  
Maintain ROM  
Increase muscle strength & improve proprioception  
Focus on core stability

### *RESTRICTIONS/PRECAUTIONS:*

No ballistic or forced stretching  
No hopping  
Monitor hip flexor and adductor muscles for irritation / overload  
Minimize strengthening of hip adductors  
NB !! Check for “true anatomic” hip extension

### **Physiotherapy:**

Continue hip, Lx Spine, SIJ mobilization  
Continue / advance stretching (especially hip flexors)  
Address fascial slings (if required)  
Continue / advance gluteal exercises  
Increase cycling activity (no interval training OR spinning)  
Increase core stability exercises  
Advance proprioception drills  
Introduce gentle active hip rotation (minimal resistance) – Please AVOID any flare-ups  
Patient may swim without pool float (No breaststroke!)  
- Treading in water (i.e. water polo) is patient specific training – this is individually assessed

### **CRITERIA TO PROGRESS TO STAGE 3:**

Full ROM (especially hip extension)  
No pain during full ROM or with Stage 2 exercise  
No GAIT pathology or compensatory patterning during GAIT  
Adequate abdominal core and gluteal strength to perform Hip Stage 2 – 3 Screening  
Hip Stage 2- 3 Screening ≥ 7 points (**refer to end of protocol**)

### **STAGE 3** ( $\pm$ 8 - 16 weeks)

#### AIM:

Optimize neuromuscular control and proprioception

Restore muscle endurance and strength

Introduce cardiovascular endurance

Advanced core stability

Advance rotational hip activity (i.e. loading activity which requires internal / external hip rotation)

Restoration of cardiovascular fitness

**COMPULSORY** biokinetic assessment. The following to be performed:

- a) Postural assessment
- b) Functional movement screening
- c) Isokinetic strength test  
Concentric vs. eccentric – flexion / extension; abduction / adduction  
Check - Range of movement – SLR, IR, ER, Thomas test

#### RESTRICTIONS/PRECAUTIONS:

No axial loading prior to full biokinetic assessment

No contact activities

Avoid hip flexors / capsule inflammation with increase of activity level

#### **Physiotherapy:**

As required – soft tissue treatment, joint mobilization / correction

Monitor exercises and activity level

Introduce lunges exercises

Introduce side-to-side drills (*only* if no compensatory movement patterns present)

Advanced neuromuscular and proprioceptive training

#### **CRITERIA FOR PROGRESSION TO STAGE 4:**

Maintenance of full and pain free ROM

Hip strength > 70% of uninvolved side

Hip Stage 3- 4 Screening  $\geq$  7 points (**refer to end of protocol**)

**STAGE 4** ( $\pm$  14 weeks – 6 months)

AIM:

Biokinetics to monitor and assess return to sport activities  
Continue to restore muscle strength and cardiovascular endurance  
Maintain and advance core and gluteal strength

**COMPULSORY repeat** biokinetic assessment. The following to be performed:

- a) Postural assessment
- b) Functional movement screening
- c) Isokinetic strength test  
Concentric vs. concentric – flexion / extension; abduction / adduction

Sport specific training programme

Return to functional / sporting drills once > 85% of strength of uninvolved leg is achieved and movement patterns are normal

<b>DOCTOR FOLLOW UP:</b>	<ul style="list-style-type: none"><li>➤ <b>6 weeks</b> post op – and by member of physiotherapy rehabilitation team</li> <li>➤ <b>3 months</b> post op – and by member of physiotherapy rehabilitation team. If progress permits – 1<sup>st</sup> biokinetic assessment (including isokinetic evaluation)</li> <li>➤ <b>6 months</b> post op, with 2<sup>nd</sup> biokinetic assessment (including isokinetic evaluation)</li> <li>➤ <b>9 months</b> and / or <b>1 year</b> post op</li></ul>
--------------------------	---