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# Rehabilitation of Arthroscopic Hip Surgery – Labral Repair

The following protocol is recommended for post-operative hip arthroscopy patients. As with all surgeries, it is advised that the PT become aware of the particulars of the surgery – hip patients may have labral tears, ligamentum teres tears, articular surface damage, adhesive capsulitis, pulvinar and fat pad atrophy or a combination of the above. These problems may have been addressed through debridement, chondroplasty, or microacetabuloplasty procedures – which involve contouring of the femoral head/neck junction or the acetabular rim. They therapist may have to alter the rehab protocol accordingly. Pain tolerance should be respected. Hip flexor, adductor tendonitis and piriformis syndrome may complicate recovery post-surgery and may be addressed through soft tissue release and strengthening.

## Phase I: Maximum Protection Phase (Week 1-4)

<u>Goals:</u> Protect integrity of repaired tissue Restore ROM within restrictions Diminish pain and inflammation Prevent muscular inhibition Normalize gait

## Precautions:

Do not push through hip pain or pinching No external rotation for 6 weeks – Be cautious in bed (bolster with pillow) No active flexion for 4 weeks except as required for ADLs Weight bearing restrictions: 50% for 6 weeks with bilateral crutches Brace to allow hip joint protection: 2-4 weeks PROM as tolerated including Grade I hip mobilizations for pain (inferior, posterior, distraction glides) Flexion: maximum 90 degrees Abduction: maximum 25 degrees

ER: to neutral IR/Extension/Adduction: pain-free range

## Criteria to Progress to Phase II

- Minimal pain, pinching, or swelling with Phase I exercises
- 90 degrees of pain-free flexion
- Minimal ROM limitations with IR, extension, abduction
- Normal heel to toe gait with two crutches (50% WB)

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Note: The intent of this protocol is to provide guidelines for progression of rehab. If is by no means intended to substitute for clinical decision making. Progression through each phase is based on clinical criteria and time frames as appropriate for your patient.

	Week:					
	1	2	3	4	5	6
Phase I: Initial Exercise						
Ankle Pumps	х	х				
Isometric-Glut, Quad, HS, Adduction	х	х				
Heel Slides-AAROM (emphasis on HS contraction to avoid hip flexion)	х	х				
Log Rolling (IR Only)	х	х				
Pelvic Tilts	х	х				
Transversus Abdominis Isometrics – Abdominal Hollows	х	х				
Prone on elbows	Х	Х				
Prone knee flexion	х	х				
Seated weight shifts – A/P & lateral	х	х				
Seated knee extension	х	х				
Seated heel raises	х	х				
Stationary Bike – No resistance or hip flexion great than 90 degrees		х	х			
(10 min if tolerated: 1-2x/day)						
Isometrics – Hip Abduction		х	Х			
Superman in prone		х	Х			
Standing 3 way hip abd, add extension		х	Х			
Pool/Hydro Track (once incisions healed-forward/backward walking,		х	Х			
Lateral stepping, mini-squats)						
Stretching hamstrings, prone quad		х	Х	Х		
Double leg bridges			Х	Х		
Standing 3 way SLR with very low resistance – Abd, Add, Ext			Х	Х	х	Х
Seated Physioball Progression – wt shifts, knee extension, etc			Х	Х		

#### Phase II: Maximum Protection Phase (Week 4-6)

<u>Goals:</u> Protect integrity of repaired tissue Increase ROM Restore normal gait pattern without crutches Progressively increase muscle strength <u>Precautions:</u> Continue 50% weight bearing through 6 weeks post-op PROM: At week 6 begin gentle ER and increase flexion per patient tolerance past 90 degrees ER : maximum 20 degrees Flexion: maximum 105 degrees Joint mobilization for pain Grade I/II (post /inf/distraction)

#### Criteria to Progress to Phase III:

- 105 degrees of flexion and 20 degrees of external rotation
- Pain-free/normal gait pattern without crutches
- Hip flexion strength >60% of the uninvolved side

#### Hip adduction, extension, IR/ER strength >70% of the uninvolved side Dr. Kenneth Sands Health First Physicians 8725 N Wickham Rd, suite 301 Viera, FL 32940 321-434-9200

1 2 6 8 3 4 5 7 9 Phase II: Intermediate Exercises Stationary Biking with Resistance (increase to 20 min; 1-2x/day) \* \* <del>.x</del>-Stretching hamstrings, prone quad, kneeling hip flexor stretch \* \* \* \* \* \* \* \* Weight Shifts – Front and side Transversus Abdominis Progression – stabilizer for biofeedback \* \* \* Manual PNF \* \* \* Elliptical \* \* \* \* Leg Press (minimal resistance to start) \* \* \* \* \* \* Standing 1/4 mini squats, heel raises \* \* Quadruped – arm, leg raises, opposite arm/leg lifts \* \* Bridges – single leg

Week:

## Phase III: Controlled Activity Phase (Week 7-9)

Goals : Restoration of muscular endurance / strength Restoration of cardiovascular endurance Optimize neuromuscular control/balance/proprioception <u>Precautions:</u> WBAT PROM: Restore full, pain-free ROM No contact activities

Criteria to progress to Phase IV:

- Hip flexion strength >79% of the uninvolved side
- Hip adduction, abduction, extension, IR/ER>80% of the uninvolved side
- Cardiovascular fitness equal to preinjury level
- Demonstration of initial agility drills with proper body mechanics

Week:

Week.											
	1	2	3	4	5	6	7	8	9	10	11
Phase III: Advanced Exercises											
Stationary Biking with Resistance (increase to 30 min: 1-2x/day)							*	*	*		
Stretching – Phase II plus Thomas stretch							*	*	*	*	*
Claimshells (begin resistance week 8)							*	*			
Rockerboard (progress double to single leg; with ball toss, wobble							*	*	*	*	*
Board etc)											
Single leg balance (progress firm to soft surface)							*	*	*		
Swiss Ball Core – bridges, trunk on ball with marching, curls, etc							*	*	*		
Planks and Side Planks							*	*	*	*	
Knee extensions & Hamstring Curls							*	*	*	*	
Speed Skaters with Theraband for Gluteus Medius							*	*	*	*	
Sport Cord – sidestepping, forward, backward walking (pause on							*	*	*	*	
Effected limb); step-overs cup/hurdles											
Full Squats								*	*	*	
Lunges – progress from single to tri-planar lunges; add med balls								*	*	*	
for resistance and rotation											
Step-Ups – anterior, lateral with eccentric lowering								*	*	*	
Theraband Walking – forward, backward, side-stepping								*	*	*	

Wobble board and rockerboard squates									*	*	*
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#### Phase IV: Return to Activity Phase (Week 10 and on): Goals: Criteria for full return to competition

Ability to perform sport-specific drills at full speed without pain Completion of functional sports test

<u>Criteria for full return to competition:</u> Full Range of Motion Hip Strength equal to uninvolved side, single leg pick up with level pelvis Ability to perform sport-specific drills at full speed without pain Completion of functional sports test

	Week:							
	10	11	12	13+				
Phase IV: Sports Specific Training								
Continue Phase III exercises as needed	Х	х	х	Х				
Biking and Elliptical	Х	х	х	Х				
Pool Running (progress from chest to waist deep water)	Х	х						
Single leg pick ups/Cone Obliques (progress to soft surface)	Х	х	х					
Step Drills-quick feet step ups (4-6 inch box) forward, Lateral	Х	х	х					
Plyometrics		х	х	х				
Sport Cord – agility drills		х	х	х				
Cutting drills			х	х				
Sports specific drills			х	Х				
Treadmill Running			х	Х				