SANFORD
ORTHOPEDICS
SPORTS MEDICINE

Hip Labrum and FAI Post-Surgical Rehabilitation Guideline

This rehabilitation program is designed to return the individual to their activities as quickly and safely as possible. It is designed for rehabilitation following Labral hip repair with FAI. Modifications to this guideline may be necessary dependent on physician specific instruction, location of repair, concomitant injuries or procedures performed. This evidence-based Labral hip fixation with FAI component is criterion-based; time frames and visits in each phase will vary depending on many factors- including patient demographics, goals, and individual progress. This guideline is designed to progress the individual through rehabilitation to full sport/ activity participation. The therapist may modify the program appropriately depending on the individual's goals for activity following Hip Labrum and FAI.

This guideline is intended to provide the treating clinician a frame of reference for rehabilitation. It is not intended to substitute clinical judgment regarding the patient's post-operative care based on exam/treatment findings, individual progress, and/or the presence of concomitant procedures or post-operative complications. If the clinician should have questions regarding post-operative progression, they should contact the referring physician.

General Guidelines/Precautions:

- ROM Restrictions and Expectations:
  - Flexion -0°–90°x 2 weeks and gradually progress avoid "pinching"
  - Extension- avoid passive hyper extensionx3 weeks
  - External Rotation- ER to 20° x 2weeks
  - Internal Rotation- NO limitations
  - Abduction-0° to 45° by 2 weeks
- Avoid "pinchy" pain with all PROM
- NO straight leg raise in flexion
- Weight bearing Restrictions:
  - Partial WB x 2 weeks-20# foot flat WB, PWB x 3 weeks if older than 50 or osteopenic bone
  - Hip plications to the capsule- PWB x 4-6 weeks
  - Microfracture –typically PWB X 6 weeks
- Return to sport timeframe expected approximately 16 weeks
- Criteria to be met for return to sport:
  - Scoring 90% or greater with involved to uninvolved-
    - Single leg hop for distance
    - Single leg triple hop for distance
    - Y balance testing; anterior, posterior/medial, posterior/lateral
    - Proper hip strategy and hip stability with step down, drop jump, lateral shuffle, deceleration, single leg triple hop, and side cut
    - Isokinetic testing of Quad, Ham, Hip Abduction (isometric) and Hip Extension (Isometric)

Hip Labrum and FAI Rehabilitation Guideline
(0-16 weeks)

PHASE	SUGGESTED INTERVENTIONS	GOALS/MILESTONES FOR PROGRESSION

Phase I
Protective Phase
 	
0-4 Weeks
 	
1/week
Expected Visits
	Key considerations:
	• WB status
	  • Depending on what procedure was performed (hip plications, microfracture, etc.)
	• 0-2 weeks:
	  • Partial WB x 2 weeks-20# foot flat WB, PWB x 3 weeks if older than 50 or osteopenic bone
	  • Hip plications to the capsule- PWB x 4-6 weeks
	  • Microfracture –typically PWB X 6 weeks
	  • Gait Training with crutches
	• 3-4 weeks:
	  • Progress WB unless microfracture (2>1>0)
	Initial ROM considerations:
	• 0-2 weeks:
	  • Flexion -0°–90°x 2 weeks
	  • Extension- avoid passive hyperextension x 3 weeks
	  • External Rotation- ER to 20° x 2weeks
	  • Internal Rotation- NO limitations
	  • Abduction-0° to 45° by 2 weeks
	  • Quadruped Rocking
	  • Stationary Bike: One hour/day total in segment times as desired x 4 weeks (remember 90° precaution for hip flexion first 2 weeks)
	  • PROM supine log rolling-caution with external rotation
	  • Stretch hip flexors (start prone over pillow, removing pillow as tolerated)
	• 3-4 weeks:
	  • Progress ER and hip flexion, avoid “pinching”
	  • Stool Rotations for Hip ER/IR
	  • bent knee fallouts (4weeks)
	  • prone hip ER/ IR (4 weeks)
	  • up to 4 weeks avoid hip rotation with hip flexion as this increases stress on labral repair
	Modalities as indicated:
	  • Game ready to reduce pain/inflammation
	Strength:
	• 0-2 weeks:
	  • pelvic tilts
	  • Hip Isometrics- Extension, Abduction, Adduction, ER
	• 3-4 weeks:
	  • AVOID SLR
	  • Hip Isometrics-flexion
	  • Hip Isotonics -extension (can be Prone), abduction, adduction, ER/IR
	  • prone knee flexion/hamstring curls
	  • supine bridges, double limb
	  • Birddogs, quadruped hip extension
	  • clam shells › isometrics
	  • Pelvic drops/hip hiking
	  • side planks › knees to full side lying
	  • leg press, bilateral (week 4)
	  • partial squats (1-2 sessions after leg press)
		Goals of Phase:
		• Protect soft tissue repair
		• Reduce joint inflammation
		• Control pain
		• Proper diagnosis of problem
		Criteria to Advance to Next Phase:
		• Pain is controlled
		• Ability to ambulate with minimal antalgic gait without crutches

Hip Labrum and FAI Rehabilitation Guideline
(0-16 weeks)

PHASE	SUGGESTED INTERVENTIONS	GOALS/MILESTONES FOR PROGRESSION

Phase II
Stability Phase
 	
5-8 Weeks
 	
1-2x/week
Expected Visits
	Key considerations:
	• WB status
	  • Depending on what procedure was performed (hip plications, microfracture, etc.)
	• ROM:
	  • At 6 weeks stretching increased to include:
	  • Standing adduction
	  • Standing or supine iliotibial band
	  • Hip flexor/prone quadriceps
	  • Hamstring
	  • Prone rotations ER/IR
	  • ER in FABRE position
	• Strength:
	  • Lower resistance and higher repetitions
	  • Elliptical
	  • Prone planks
	  • Double › single leg bridges
	  • Multi hip 4 way exercise (hip flexion, adduction, abduction, hip extension)
	  • Clam shells/side lying hip abduction, repetitions
	  • Fire Hydrants, isometrics › reps, standing
	  • Bilateral cable column rotations › single leg cable column (can progress to foam or unstable surface.
	  • Lateral sidestepping, band at knees
	  • Step ups
	  • Forward step downs
	  • Lateral lunges
	  • Single leg squat start 1 week after lunges, start with supported › skater squats
	  • Suitcase carries
	  • Waiter carries
		Goals of Phase:
		• Obtain full mobility of hip
		• Normalize gait pattern
		• Gain function and independence in daily activities without discomfort
		• No Trendelenburg sign
		Criteria to Advance to Next Phase:
		• Tolerate strength progression

Phase III *Movement and Strength Phase* *9-12 Weeks* *1x/week* *Expected Visits*	• ROM: • Progress with end range stretching of hip flexor and rest of hip structures ***Exercise Suggestions:*** • Continue with earlier strengthening • Rolling plank (side plank › front plank › opposite side plank) • Deadlifts double › single leg deadlifts • Rotational lunges • Light agility ladder drills toward end of phase- horizontal rather than vertical movement pattern to begin with • Lateral shuffle	***Goals of Phase:*** • Advanced strengthening and endurance to restore normal function in preparation for sport specific drills/ heavier work loads • Y Balance test (anterior, posterior/ medial, and posterior/lateral 80% of uninvolved • Hip muscle testing 90% of uninvolved • Single plane to multi plane exercise • Progression from stable surface to unstable surface

Phase IV
Advanced Movement and Impact Phase
 	
13-16 Weeks
 	
1x/week to 1x Every Other Week Expected Visits
	• Strength:
	  • Olympic lifts
	  • Progression to running program
	  • Progression to a higher intensity sport specific agility drills-i.e. bounding, drop jumps, squat jumps, box jumps, barrier jumps, triple hops, box hops, barrier hops, 180 › jumps. Begin throwing (if appropriate) with focus on pelvic control.
		Goals of Phase:
		• Allowing safe and gentle sport specific agility drills to prepare for return to sport or work activities

Hip Labrum and FAI Rehabilitation Guideline
(0-16 weeks)

PHASE	SUGGESTED INTERVENTIONS	GOALS/MILESTONES FOR PROGRESSION
Phase V *Advanced strengthening and eccentric control phase* *16+ Weeks* *1 Expected Visits*	***Suggested Treatments:*** • Sport specific testing	***Suggested Criteria for Discharge:*** • Limb similarity index of 90% or greater on functional hop tests single hop for distance, triple hop for distance, and Y balance testsa9anterior, posterior/medial, posterior/lateral • 45/50 on Biomechanical functional assessment tests (if performed) • No pain or complaints of instability with functional progression of sport specific skills • Normal stride symmetry with running

REFERENCES:

1. Luke Spencer-Gardner, Joseph J. Eischen, Bruce A. Levy, Rafael J. Sierra William M. Engasser, Aaron J. Krych. A comprehensive five-phase rehabilitation programme after hip arthroscopy for femoroacetabular impingement. Knee Surg Sports Traumatol Arthrosc (2014) 22:848–859.
2. Kelly BT, Weiland DE, Schenker ML, Philippon MJ.Arthroscopic labral repair in the hip: surgical technique and review of the literature. Arthroscopy. 2005;21:1496-1504.
3. Kelly BT, Williams RJ, Philippon MJ. Hip arthroscopy: current indications, treatment options, and management issues. Amer J Sports Med. 2003;31:1020-1037.

014000-01458 2/20

SANFORD
ORTHOPEDICS
SPORTS MEDICINE