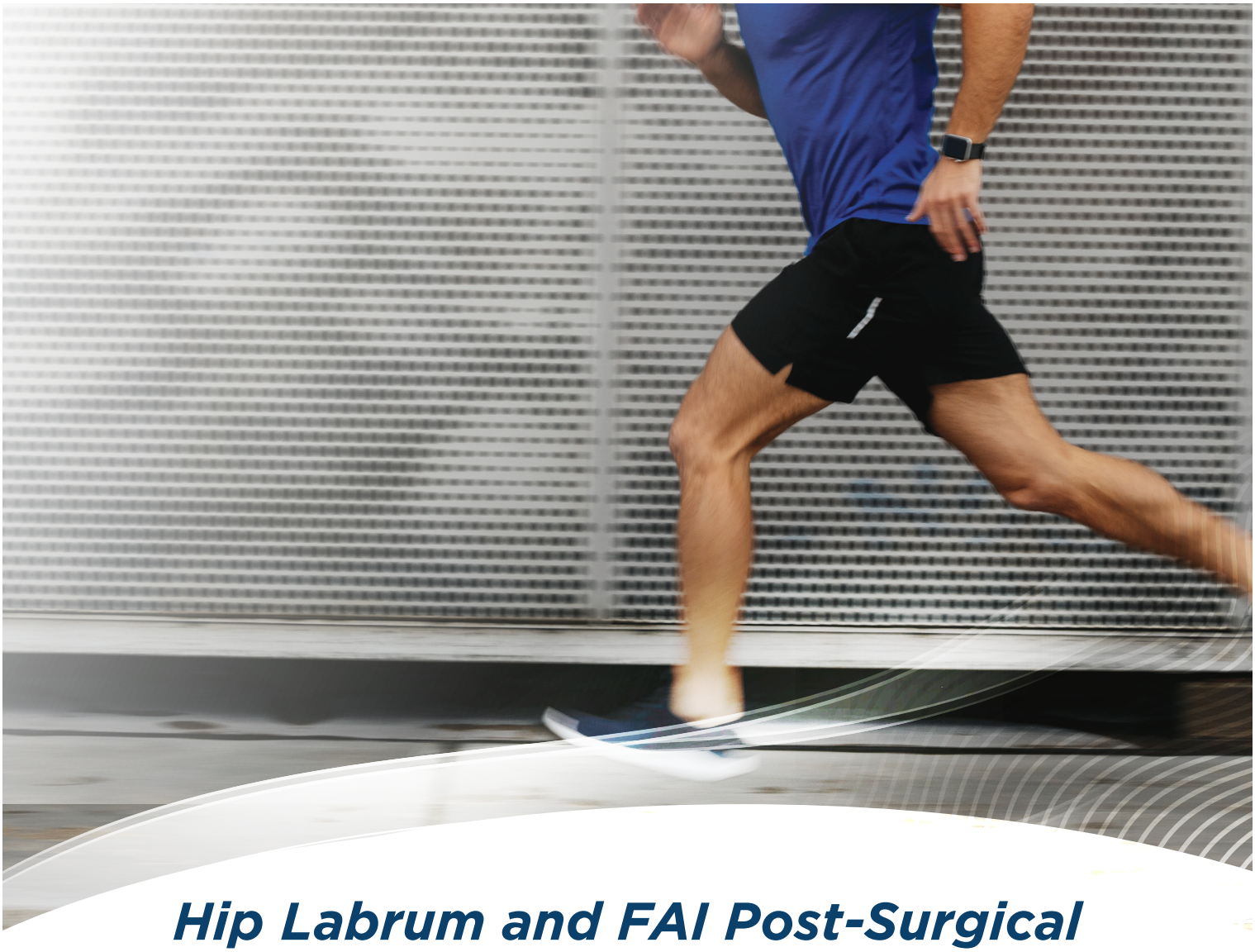

Hip Labrum and FAI Post-Surgical

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.

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General Guidelines/Precautions:

- ROM restrictions and expectations:
    - Progression to running program at 4 months based on Level 1 Return to Play testing, physician preference, and demonstrating adequate symmetry and shock absorption with running mechanics and plyometrics
    - Flexion—0°–90°x 2 weeks and gradually progress avoid “pinching”
    - Extension—avoid passive hyper extension x 3 weeks
    - External Rotation—ER to 20° x 2 weeks
    - 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 1
Protective Phase
 	
Weeks 0-6
 	
Expected visits: 1-2/week
	Discuss:
	• 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)
	
	Suggested Treatments:
	Modalities as indicated
	  • Game ready to reduce pain/inflammation
	
	ROM:
	  • 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
	  • 5-6 weeks:
	  • Progress prone lying to prone on elbows -> prone on extended hands
	  • Progress PROM to comfort in all directions (limit ER stretching combined with hip flexion)
	
	Exercise Examples:
	Weeks 0-2
	• Pelvic tilts
	• Hip Isometrics- Extension, Abduction, Adduction, ER
		Goals of Phase:
		1. Protect soft tissue repair
		2. Reduce joint inflammation
		3. Control pain
		
		Criteria to Advance to Next Phase:
		1. Pain is controlled
		2. Ability to ambulate with minimal antalgic gait without crutches

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

	Week 3-4 • 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) **Week 5-6** • Avoid SLR in flexion • Hip Isometrics-hip flexors within comfortable range • Hip Isotonics -extension (Bent over edge of plinth progressing to prone as motion allows), abduction, adduction, ER/IR • Birddogs, • Quadruped hip extension • Clamshells-> isometrics progressing to isotonics • Bridges – single leg • Pelvic drops/hip hiking • Side planks →knees to full side lying • Leg press, bilateral (week 4) • Partial squats (1-2 sessions after leg press) • Vertical Squats to comfortable depth with positive tibial angle • Lateral band and Monster walks • Tall kneeling progressing to half kneeling • Single leg balance with clock taps • Palloff presses – Small squats progressing to split squat • Non-impact cardiovascular training – Bike with resistance, elliptical (week 6)	

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

Phase II *Maximum Protection Phase* *Weeks 6-8* *Expected visits: 1-2/week*	***Specific Instructions:*** • WB status depending on what procedure was performed (hip plications, microfracture, etc.) ***Suggested Treatments:*** **ROM:** • At 6 weeks stretching increased to include: • Standing adduction • Standing or supine iliotibial band • Hip flexor/prone quadriceps • Hamstring • Quads • ER in FABRE position ***Exercise Examples:*** lower resistance, higher repetitions • Elliptical, Stairmaster, Biking with progressive resistance • Prone planks • Bridge from elevated box (double -> single leg) or added resistance across hips • 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 • Squat progression to single leg squat start 1 week after lunges, starting with offset squats -> skater -> supported -> single leg get ups • Squats above 90 degrees hip flexion with resistance (goblet or band) • Suitcase carries • Waiter carries	***Goals of Phase:*** 1. Obtain full mobility of hip 2. Normalize gait pattern 3. Gait function and independence in daily activities without discomfort 4. No Trendelenburg sign ***Criteria to Advance to Next Phase:*** 1. Tolerate strength progression 1. Pain-free ADL's 1. LSI for quads/hamstrings at 70% 1. LSI for hip abduction and extension at 70% 1. Pain-free controlled step down (8 inch)

Phase III
Movement and Strength Phase
 	
Weeks 9-12
 	
Expected visits: 1/week
	Suggested Treatments:
	ROM:
	• Continue to reinforce full extension
	• Progressive flexion as tolerated
	
	Exercise Examples:
	• Continue with earlier strengthening with overload (hip flexion less than 90 degrees) progressing intensity (4-6 RPE)
	• Rolling plank (side plank->front plank->opposite side plank)
	• Deadlifts: double->single leg deadlifts
	• Rotational lunges
	• Progress squats to limited depth/weight front squats
	  • Consider foot placement for comfort
	• Rear foot elevated split squat
	  • Consider foot placement for biasing hip or knee
	• Light agility ladder drills toward end of phase- horizontal rather than vertical movement pattern to begin with
	• Lateral shuffle
	• Pool or Alter G treadmill running (per physician)
		Goals of Phase:
		1. Advanced strengthening and endurance to restore normal function in preparation for sport specific drills/ heavier work loads
		2. Tolerate single plane to multi plane exercise
		3. Progression from stable surface to unstable surface
		
		Criteria to Advance to Next Phase:
		1. Star Excursion Balance Test 80% of uninvolved side
		2. LSI of 80% for hip abductors and extensors
		3. LSI of 80% for quads/ hamstrings

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

Phase IV *Adanced Movement and Impact Phase* *Weeks 12-16* *Expected visits: 1/week to 1/every other week*	***Exercise Examples:*** • Olympic lifts – progress intensity of program to 7-10 RPE with emphasis on high intensity/low rep training. • Modify starting position for comfort as needed • Begin impact activities – begin jumping progression • Begin throwing (if appropriate) • Progression to land running program • Progression to sport specific agility drills	***Goals of Phase:*** 1. Allowing safe and gentle sport specific agility drills to prepare for return to sport or work activities
Phase V *Progressive Return to Sport Phase* *Weeks 16+* *Expected visits: 1*	***Specific Instructions:*** • Progression of exercises based on individual goals and sport requirements.	***Suggested Criteria for Discharge*** 1. Refer to Hip Return to Sport Testing 2. No pain with sport specific activities

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