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# POSTOPERATIVE HIP REHABILITATION

#### LABRAL REPAIR AND OSTEOPLASTY

### **PHASE 0: PREOPERATIVE VISIT**

- · Goals: patient education, optimization of musculature
- Counsel patient on:
  - Weight bearing as tolerated with crutches
  - How to perform postoperative Home Exercise Plan (HEP) (see below)
  - No restrictions preoperatively. Core, flexibility, strengthening as tolerated.

### PHASE 1: IMMEDIATE POSTOPERATIVE (0-6 WEEKS)

- Joint Protection Patient Education
  - Avoid at all times actively lifting, flexing, or rotating hip (thigh) x2-3 wks.
  - Assistance from family/friend is crucial for transitioning positions in the 1st week after surgery.
  - Do not sit in a chair or with hip bent to 90° for greater than 30 minutes in the first 2 weeks (to avoid tightness in the front of the hip).
  - o Lay on stomach for 2-3 hours/day to decrease tightness in the front of the hip
- Weight-bearing Restriction
  - Labral repair +/- osteoplasty (bony work)
    - Weight bearing as tolerated with crutches for 2-3 weeks
    - After this time, wean off crutches  $(2\rightarrow 1\rightarrow 0)$  as gait normalizes
  - Labral repair WITH MICROFRACTURE
    - Flat foot weight bearing (20lb max) for 5-6 weeks
    - After week 6, wean off crutches  $(2 \rightarrow 1 \rightarrow 0)$  as gait normalizes
- Range of Motion Restrictions
  - Stop shy of pinchy pain with all PROM
    - Internal rotation: no limitation
    - External rotation: 0° (no passive) for 2 weeks
    - Flexion: 90° for 2 weeks then 120° for week 3
      - NO STRAIGHT LEG RAISES!
    - Abduction: 0-25° by 3 weeks
  - Critical to focus on gluteal muscle group, iliopsoas, and hip rotators
  - Beware development of tendonitis of hip flexors (rectus), adductors, and piriformis.
    - This can occur with too aggressive rehab, particularly eccentric training.
  - Goal is to protect the joint and avoid irritation with symmetric ROM returning by 6-8 weeks.
- Patient Home Exercise Plan (HEP) for weeks 1&2 (given to patient):

- It is beneficial to change positions often after hip arthroscopy. Alternate sitting, reclining, and lying down approximately every 30 minutes. Feel free to move around at home as much as you can tolerate, as we do not want your hip to get stiff.
- DO NOT STAY IN BED. We recommend at least 10 minutes of walking every hour.
- O Spend 1-2 hours per day on your stomach. 10-20 minutes, 7-8 times per day.
- The day after surgery, we encourage the following:
  - Perform PASSIVE hip circles while lying down: family/friend moves hip, with your muscles completely relaxed, in small circles clockwise and counter clockwise. Do not go past belly button or shoulder width. 150 reps three times per day.
  - Perform PASSIVE hip flexion (bending): family/friend moves hip, with your muscles completely relaxed, up and down 30 to 60 degrees with knee slightly bent. 150 reps three times per day.
  - You may ride a stationary bike twice a day for 5-10 minutes (no resistance).
     Keep hip flexion less than 90 degrees adjust seat to ensure < 90 degrees.</li>
  - Ankle pumps: with leg straight, pump foot up and down. 20-30 reps, three times per day.
  - **Gluteal sets**: tighten buttock muscles for 5-second holds. 20-30 reps, three times per day.
  - **Transverse abdominal sets**: squeeze belly button toward spine without moving your pelvis for a 5-second hold. 20-30 reps three times per day.
- Recommended exercises with therapist; please keep ROM restrictions in mind. Can lengthen protocol timing as needed for each patient.

		Week 1	2	3	4	5	6
Muscle stretch: quad, adductor, hamstring	Daily	✓	✓	✓			
Muscle stretch: glutes, piriformis	Daily			✓	✓		
Isometrics (2x/day): glutes, quad, hamstring, transversus abdominus, abductors, adductors	Daily	<b>✓</b>	✓				
Ankle pumps with resistance	Daily	✓	✓	✓			
Soft tissue work & scar mobilization (2x/day)	Daily		✓	✓	✓	✓	✓
Stomach stretch (lie flat on stomach, can ↑ up to 60 min)	Daily	✓	✓	✓	✓		
Upright stationary bike (up to 20 min, 2x/day) – NO RECUMBENT BIKE & NO RESISTANCE	Daily	<b>✓</b>	✓	✓	✓	✓	<b>✓</b>
Quadruped rocking	Daily	✓	✓	✓	✓		
Lower abdominal progression (heel slides progress to marching, ± strap)	Daily	<b>✓</b>	✓	✓	<b>✓</b>	✓	✓
Gluteal progression	Daily	✓	✓	✓	<b>✓</b>	✓	✓
Passive ROM/circumduction	Daily	✓	✓	✓	<b>\</b>	✓	✓
Passive ROM/circumduction: add extension & ER, introduce stool and prone rotations	Daily				✓	✓	✓

# PHASE 2: STABILITY (3-8 WEEKS)

• If microfracture, HOLD activities in shaded boxes until week 6 in all phases

		Week 3	4	5	6	7	8
Standing weight shifts: side to side & anterior to posterior	5x/week	✓	✓				
Backwards & lateral walking without resistance	5x/week	✓	✓				
Prone hip extension	5x/week	✓	✓	✓			
Prone hamstring curl	5x/week	✓	✓	✓			
Prone pendulum (IR/ER)	5x/week	✓	✓	✓			
Proprioception:							
Balance board, single leg stance	5x/week	✓	✓	✓	✓		
Bilateral→unilateral→foam→dynadisc							
Bridging progression	5x/week	✓	✓	✓	✓	✓	
Standing hip abduction in internal rotation	5x/week		✓	✓	✓		
Pool therapy (water walking)	5x/week			✓	✓	✓	✓
1/3 knee bend 2 legs	5x/week		✓	✓	✓	✓	
Advanced double leg squat	5x/week				✓	✓	✓

PHASE 3: FUNCTIONAL STRENGTHENING (4-16 WEEKS)

		Week 4	5	6	7	8	10	12	16
Stationary bike with resistance	3x/week		✓	✓					
Leg press	3x/week	✓	✓	✓	✓				
Box step up	3x/week			✓	✓	✓	✓		
Bosu	3x/week			✓	✓	✓	✓	✓	
Lunges – Forward 90	3x/week			✓	✓	✓	✓	✓	
Lateral lunges	3x/week			✓	✓	✓	✓		
Single knee bends	3x/week				✓	✓			
Lateral walk with squat and band	3x/week			✓	✓	✓	✓		
Agility-diagonal lateral agility	3x/week					✓	✓	✓	✓
Side planks	3x/week	✓	✓	<b>✓</b>	✓	✓	✓	✓	✓
Prone planks	3x/week		✓	<b>✓</b>	✓	✓	✓	✓	✓
Single leg bridge	3x/week		✓	<b>✓</b>	✓	✓	✓	✓	✓
Rotational activities (if pain free)	3x/week					✓	✓	✓	✓
Slide board exercise	3x/week						✓	✓	✓

# PHASE 3: CARDO/FUNCTIONAL EXERCISE (4+ WEEKS)

- Can start at 4 weeks if gluteus strength is present
- If microfracture, WAIT until 6 weeks

		Week 4	5	6	7	8	10	12	12-24
Deep pool work (aqua jog, scissor, swim with pulling)	3x/week		✓	✓	✓	<b>√</b>			
Deep pool work (swim with kicking)	3x/week				✓	✓			
Water running or Alter G treadmill	3x/week					✓	✓	✓	
Stationary bike with resistance	3x/week		✓	✓					
Elliptical	3x/week			✓	✓	✓	✓	✓	✓
Outdoor biking (resisted biking)	3x/week				✓	✓	✓	✓	✓
Functional activity (hike, kick, throw)	3x/week						✓	✓	✓
Sport-specific progression	3x/week						✓	✓	✓

# PHASE 4: RETURN TO ACTIVITY/SPORT (4-6 MONTHS)

- Typically 4-6 months for return to sport, 1 year for maximal recovery
- Microfracture can delay this recovery by several months
- Criteria for return to play:
  - Near pain-free with rehab activities
  - o MMT within 10% of non-operative extremity

- o Biodex peak torque of quad & hamstring within 15% of non-operative extremity
- o Single-leg cross over triple hop for distance with score

		Week 13	17	21	25
Plyometrics progression	3x/week	✓	✓	✓	
Side to side lateral movements	3x/week		✓	✓	
Forward/backward running with cord	3x/week	✓	✓		
Straight plane agility: Chop-downs, back peddling, side shuffles	3x/week		<b>√</b>	<b>✓</b>	
Multi-plane agility: Z and W cuts, cariocas, ladder	3x/week		✓	<b>✓</b>	<b>✓</b>
Sport specific drills/training	3x/week		✓	✓	✓