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YOU DESERVE A COMEBACK STORY

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UTAH ORTHOPAEDIC SPECIALISTS

Rehabilitation Protocol for Hip Arthroscopy with Labral Repair/Reconstruction

Procedures Performed:

☐ Acetabuloplasty
☐ Labral repair
☐ Labral debridement
☐ Labral reconstruction
☐ Femoroplasty
☐ Capsular repair
☐ Endoscopic Trochanteric Bursa Excision
☐ Endoscopic Abductor Repair
☐ Chondroplasty
☐ Microfracture

Specific Case Complexity and Limitations:
☐Primary Procedure
☐Revision Procedure
Comments:

_____

Pace of Protocol:
☐ROUTINE
☐LESS-AGGRESSIVE
Comments:

_____

PHASE I: *Immediate Post-Op* (0-3 WEEKS AFTER SURGERY)

Rehabilitation Goals	• Minimize pain and inflammation • Protect integrity of repair • Avoid postoperative adhesions • Improve pain-free AROM/PROM within stated parameters • Attain non-antalgic gait with use of device and appropriate weight bearing • Address muscle inhibition • Patient demonstrates independence with initial home exercise program
Weight Bearing	• Partial weight bearing 20 lbs, step-to pattern, foot flat gait with crutches
Range of Motion Limitations	• Hip Flexion: 0-90 deg • Hip Extension: 0 degrees, no motion beyond neutral • Hip Abduction: 0-30 degrees • Hip External Rotation: 0-30 degrees • Hip Internal Rotation: 0-30 degrees
Precautions/ Guidelines	• No active straight leg raises • Avoid ambulation to fatigue or pain • No active hip flexion for days 0-21, hip flexion should be self-assisted for functional mobility • No Gr III-IV hip joint mobilization for 1st 8 weeks • No long axis hip distraction for first 8 weeks for labral repair • No long axis hip distraction for first 12 weeks for labral reconstruction • Avoid pain and pinching in the hip at all times Throughout rehabilitation period every effort should be made to avoid: • Hip flexor tendinitis • Synovitis of operative joint • Trochanteric bursitis • Lower back pain or sacroiliac pain

Interventions	*Patient Education*
	• Activity modification, bed mobility, positioning:
	  ○ No crossing of legs
	  ○ Avoid sitting for more than 30 minutes for first 2 weeks, vary position frequently throughout the day. Gradually increase sitting time as tolerated after first 2 weeks.
	  ○ Sit with hip angle less than 90 degrees by sitting on a highchair or sit slightly reclined
	  ○ Prone lying 15 minutes 2-3 times per day to avoid hip flexor contracture
	  ○ Assist operative leg when getting in/out of bed, in/out of car and for all functional mobility
	  ○ Consider obtaining raised toilet seat to avoid hip flexion greater than 90 degrees when sitting on toilet
	
	Manual Therapy
	• Soft tissue mobilization as appropriate for quadriceps, hamstrings, TFL, gluteus medius, iliacus, psoas, quadratus lumborum, lumbar paraspinals. Avoid suture sites until sutures removed and incisions healed.
	• Joint mobilizations to lumbar spine/sacrum to address lumbosacral dysfunction as indicated

	• Gr I-II hip joint mobilizations for pain modulation as appropriate • Initiate small range hip circumduction and passive IR as indicated below *Range of motion/Mobility* • PROM small range hip circumduction at 70° Hip Flexion • PROM log rolls to internal rotation/external rotation *Gait Training* • Gait training with B axillary crutches maintaining indicated weight bearing • Stair training with step to pattern, maintaining indicated weight bearing with rail/assistive device *Modalities* • Cryotherapy as needed • Electrical stimulation for pain management as needed *Therapeutic Exercise* • Supine Ankle Pumps • Supine Quad Set • Supine Glute Set • Transversus Abdominis Activation Hook Lying • Prone Knee Flexion • Passive Supine Hip Flexor Stretch *Cardiovascular Exercise* • Upright Stationary Bike
Criteria to Progress	• Minimal pain with ambulation • Non-antalgic gait with use of crutches • Minimal pain at rest • Patient able to perform exercise program without increase in baseline pain • Patient compliant with weight bearing, home exercise program, and activity precautionsg=--

PHASE II: *Intermediate Post-Op* (4-6 WEEKS AFTER SURGERY)

Rehabilitation Goals	• Progress weight bearing as appropriate per timeline • Progress ROM as tolerated per protocol • Minimize pain and inflammation • Protect integrity of repair • Avoid postoperative adhesions • Improve pain-free AROM/PROM within stated parameters • Attain non-antalgic gait with use of device and appropriate weight bearing • Address muscle inhibition • Patient demonstrates independence with initial home exercise program
Weight Bearing	• Gradually increase weight bearing to WBAT pain-free
Range of Motion	• Flexion: gradually increase in pain free manner

Limitations	• Extension: 0 -10 degrees • Abduction: 0-45 degrees • External Rotation: 0-45 degrees • Internal Rotation: 0-45 degrees
Precautions/ Guidelines	• No active straight leg raises for 8 weeks • No Gr III-IV hip joint mobilization for 1st 6 weeks • No long axis hip distraction for first 8 weeks for labral repair • No long axis hip distraction for first 12 weeks for labral reconstruction • Avoid pain and pinching in the hip at all times • Avoid functional activities that cause hip pain
Interventions *-Continue with Phase I interventions*	*Manual Therapy* • Soft tissue mobilization as appropriate per earlier phases • Joint mobilizations to lumbar spine/sacrum to address lumbosacral dysfunction as indicated • Gr I-II hip joint mobilizations as appropriate • Scar mobilization to portal scars as appropriate • PROM small range hip circumduction at 70 degrees flexion • PROM log rolls to internal rotation/external rotation • PROM all motions within allowed ROM *Gait Training* • Increase to weightbearing as tolerated with bilateral axillary crutches and normalize gait pattern. Avoid contralateral pelvic drop. • As tolerated, decrease to single crutch and normalize gait pattern. • Wean from crutches by 6-8 weeks as tolerated. *Modalities* • Cryotherapy as needed • Electrical stimulation for pain management as needed *Therapeutic Exercise* *Continuation of Phase 1 Exercises as deemed appropriate by treating physical therapist* • Quadruped Rocking • Hip rotations on stool IR/ER • Prone B hip IR • Hook-lying Lumbar Rotation (small range) • Hip ABD/ADD Isometrics Hook-lying • Hook-lying Gluteal Set • Standing Knee Flexion • Quadruped Hip Extension Knee Slides for Operative Leg w/TrA Activation • Quadruped ‘Cat and Camel’ Exercise • Supine Modified Thomas Stretch (operative leg straight) • Sidelying Piriformis Stretch • Bilateral Bridging • Standing Hip Abduction • Quadruped Hip Extension for Operative Leg • Standing Hip Extension to Neutral • Counter Plank

	• Single Leg Balance • Sidelying Clamshell in Neutral • Hip Internal Rotation Prone with Resistance *Cardiovascular Exercise* • Upright bike up to 20 minutes, 2 x per day with seat slightly elevated to minimize excessive hip flexion, no resistance
Criteria to Progress	• ROM within functional limits • Ascend/descend 8-inch step with good pelvic control • Good pelvic control during single-limb stance • Normalized gait without an assistive device • No joint inflammation, muscular irritation, or pain • Good neuromuscular control and optimal muscle firing patterns

PHASE III: *Late Post-Op* (7-12 WEEKS AFTER SURGERY)

Rehabilitation Goals	• Performance of exercise program without hip pain • Normalize hip ROM through appropriate ROM progression as outlined • Good activation of hip musculature without evidence of muscle inhibition • Normalized soft tissue of hip and lumbopelvic region • Normal gait without evidence of gait deviations
Weight Bearing	• 6-8 weeks post-op: Gradually wean from crutches, decrease to single crutch, then without device as tolerated
Range of Motion	• Continue to increase hip flexion gradually in a pain-free manner • Increase hip extension, abduction, external rotation, and internal rotation ROM to full as tolerated
Precautions/ Guidelines	• No extreme combined ROM (e.g. flexion/IR, flexion/ER) • No plyometrics • No running • No squatting below 90 degrees • Avoid painful ROM • No pivoting on operative leg • Avoid symptom provocation during ambulation, ADLs, or therapeutic exercise and avoid post-activity soreness • Avoid pinching in operative hip with range of motion exercises
Interventions *-Continue with Phase I-II interventions*	*Manual Therapy* • Soft tissue mobilization per earlier phases • Joint mobilizations to lumbar spine/sacrum to address lumbosacral dysfunction as indicated • Gr III-IV hip joint mobilization as needed to address joint hypomobility • Long axis hip distraction if needed beginning at 8 weeks for labral repair • No long axis hip distraction for first 12 weeks for labral reconstruction • PROM small range hip circumduction at 70 degrees flexion • PROM log rolls to external and internal rotation

	• PROM all motions within allowed ROM *Gait Training* • Normalize gait without assistive devices. • If patient has pain with ambulation continue to use 1 crutch and wean as tolerated *Modalities* • Cryotherapy as needed • Electrical stimulation for pain management as needed *Therapeutic Exercise* • Sidelying Hip Abduction • Bridge with Aternating Leg Extension • Side Plank- modified (knees/forearm) • Modified Plank (knees/forearms) • Quadruped Alternating Leg Extension (progress to opposite arm/leg as tolerated) • Partial Range Squats (gradually increase to 90 degree squats) • Prone Hip Extension • Single Leg Forward Weight Shifts (progressing to Romanian dead lift) • Lateral Band Walk • Backwards Monster Walk with Band • Banded Hip Clamshell • Single Leg Balance with Clock Taps • Single Leg Balance with Hip ABD and Band Resistance • Single Leg Balance with Hip Ext and Band Resistance • Paloff Press • Standing IT Band Stretch *Cardiovascular Exercise* • Upright stationary bicycle: gradually increase time and resistance as tolerated • Elliptical training: pedaling forward and backward if pain-free, gradually increase time and resistance as tolerated • Swimming: initiate flutter kick as tolerated, avoid frog kicking
Criteria to Progress	• ROM within normal limits pain-free • Alternate Ascend/Descend 8-inch step with good pelvic control no UE support • Good pelvic control during single-limb stance and dynamic balance • Normalized gait pain-free without an assistive device • No Pain at rest, ADL/IADL nor walking • Strength of operative hip 75% of contralateral hip • No joint inflammation, muscular irritation, or pain • Good neuromuscular control and optimal muscle firing patterns

PHASE IV: *Transitional* (12+ WEEKS AFTER SURGERY)

Rehabilitation Goals	• Independent home exercise program • Optimize ROM • >=4/5 LE strength, >=4/5 trunk strength • Improved dynamic balance

	• Pain-free ADL • Pain-free hip flexion with ADLs and functional mobility
Range of Motion	• If full hip ROM still not attained, continue to progress as tolerated
Precautions/ Guidelines	• No extreme combined ROM (e.g. flexion/IR, flexion/ER) • No plyometrics • No running • No squatting below 90 degrees • Avoid painful ROM • No pivoting on operative leg • Avoid symptom provocation during ambulation, ADLs, or therapeutic exercise and avoid post-activity soreness • Avoid pinching in operative hip with range of motion exercises
Interventions *-Continue with Phase I-III interventions*	*Manual Therapy* • Soft tissue mobilization as appropriate per earlier phases • Joint mobilizations to lumbar spine/sacrum to address lumbosacral dysfunction as indicated • Gr III-IV hip joint mobilization as needed to address joint hypomobility • Long axis hip distraction if needed *Modalities* • Cryotherapy as needed • Electrical stimulation for pain management as needed *Therapeutic Exercise* • Progressive lower extremity and core exercises - progress exercises from prior phases by increasing challenge and resistance • Advanced balance exercises as appropriate for sport or desired recreation • Sport specific plyometrics and agility exercises as appropriate • Progress core strengthening as deemed appropriate by therapist *Cardiovascular Exercise* • Upright stationary bicycle: gradually increase time and resistance as tolerated • Elliptical training: pedaling forward and backward if pain-free, gradually increase time and resistance as tolerated • Swimming: initiate flutter kick as tolerated, avoid frog kicking
Criteria to Progress	• Y Balance Test Limb symmetry index 80% of uninvolved side • Strength of operative hip 90% of uninvolved side • Perform progressed exercise program without pain • No joint inflammation, muscular irritation, or pain

PHASE V: *Early Return to Sport* (4 MONTHS AFTER SURGERY)

Rehabilitation Goals	*Please note: Individuals who do not engage in higher level activities may not need to progress to advanced and sport specific activities.*

	• Progress to sport specific training without pain • Progress to jogging pain free when cleared by surgeon • Independent home exercise program • Optimize ROM •5/5 LE strength, >=4/5 trunk strength • Normal Muscle Length of B LE • Good, dynamic unilateral balance of operative extremity • Pain-free with all activities
Precautions/ Guidelines	• Avoid pain in hip joint with functional activities or exercises • If post-exercise joint pain or limping occurs, activity level should be decreased • Avoid joint inflammation • Focus on quality of movement and exercise
Interventions *-Continue with Phase II-IV interventions*	*Manual Therapy* • Soft tissue mobilization as appropriate per earlier phases • Joint mobilizations to lumbar spine/sacrum to address lumbosacral dysfunction as indicated • Gr III-IV hip joint mobilization as needed to address joint hypomobility • Long axis hip distraction if needed *Modalities* • Cryotherapy as needed • Electrical stimulation for pain management as needed *Therapeutic Exercise* • Progress strength, proprioception, dynamic balance, agility, and power to address sport specific demands. Sport specific retraining as tolerated. *Cardiovascular Exercise* • Upright stationary bicycle: gradually increase time and resistance as tolerated • Elliptical training: pedaling forward and backward if pain-free, gradually increase time and resistance as tolerated • Swimming: gradually progress time and swimming strokes at tolerated • Jogging: initiate at 16-18 weeks as indicated by referring surgeon and patient status
Criteria for Discharge	• Cross over triple hop for distance 90% of uninvolved side • Y Balance Test Limb symmetry index 80% of uninvolved side • Patient able to jog 30 minutes • Patient able to perform sport specific drills without pain • Good neuromuscular control and optimal muscle firing patterns *Outcome Measures:* • Hip Outcome Score (HOS) ○ If unavailable, Lower Extremity Functional Scale (LEFS) may be used

Protocol adapted from Mass General Sports Medicine Physical Therapy Rehabilitation Protocols. See https://www.massgeneral.org/orthopaedics/sports-medicine/physical-therapy/sports-rehab-protocols