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POST OPERATIVE HIP ARTHROSCOPY + MICROFRACTURE

LABRAL REPAIR, LABRAL RECONSTRUCTION, FEMOROPLASTY, CHONDROPLASTY, ACETABULOPLASTY

	Time Frame (Weeks)	Guidelines	Precautions
PHASE I	0 to 3	**MANUAL THERAPY / RANGE OF MOTION** • SOFT TISSUE MASSAGE ◊ Light quad, hamstring, glute STM or retrograde • PASSIVE ROM ◊ Flexion as tolerated in supine ◊ Circumduction in about 10° of hip flexion ◊ Hip Abduction in about 10° of hip flexion ◊ Log roll: if painful in supine, perform over a foam roller ◊ IR supine @ 90° and prone @ 0° ◊ ER in 30-90° of hip flexion • PASSIVE ROM (to be done by caregiver) ◊ Circumduction in about 10° of hip flexion ◊ Hip abduction in about 10° of hip flexion ◊ Log roll ◊ IR supine 90° **EXERCISE PROGRESSION** • POST-OP DAY 1 ◊ Stationary bike with no resistance: 15 minutes up to 2x per day; as tolerated ◊ Isometrics: (2x/day) Glute, quadriceps, hamstring, abduction, and adduction; as tolerated ◊ Prone lying “Tummy time” 2+ hours per day • POST-OP DAY 8-14 ◊ Add Hip IR/ER isometrics (2x/day) ◊ Initiate basic core: pelvic tilting, TVA and breathing re-education ◊ Standing hamstring curls (WB on uninvolved side only), pilates ring adduction/abduction ◊ Standing abduction/adduction (WB on uninvolved side only) ◊ Butterflies and reverse clams as tolerated ◊ BFR protocol per availability (see Appendix 1)	**WEIGHTBEARING:** • Flat Foot NWB x 6 weeks. Make sure that their foot is on the ground demonstrating a normalized walking pattern (NO HOLDING THE HIP UP INTO HIP FLEXION, but maintaining no weight bearing. **ROM RESTRICTIONS** • Flexion as tolerated • ER as tolerated mid range flexion • IR as tolerated • Hip extension to 0° • ER to 0° in hip flexion < 30° **BRACE/BOOTS:** Dr. Genuario: • Bledsoe brace: 30°-75° x 3 weeks, not required with sleeping Dr. Mayer: • De-rotational boots while sleeping x 2 weeks **CPM:** • 6 hours/day cumulatively OR stationary bike 30 min/day without resistance **SLEEPING:** • No restrictions on sleeping position. Preferred either supine or on surgical side. • No Sleeping in CPM **OTHER:** • Avoid anterior aggravation/hip flexor irritation • Start bandage changes the first day post-op using the dressing change kit provided. Make sure covered with tegaderm if in shower.

CRITERIA FOR PROGRESSION (must be met before progression into PHASE II)

1. Passive hip flexion to 90 degrees without irritation/pain.
2. Pain-free prone lying > 10 minutes consecutively
3. Proper TA activation with biofeedback x 60s without tenting, doming or holding of breath
4. Single leg isometric glut activation x 10/side with only glut activated and no hamstring or low back compensation

	Time Frame (Weeks)	Guidelines	Precautions
PHASE II	3 to 6	**MANUAL THERAPY / RANGE OF MOTION** • MANUAL THERAPY ◊ STM anterior and posterior hip, lateral quad/ITB ◊ Light incision mobility • PASSIVE ROM TO BE DONE BY THERAPIST ◊ Flexion as tolerated in supine ◊ Circumduction in about 10° of hip flexion ◊ Hip abduction in about 10° of hip flexion ◊ Log roll: if painful in supine, perform over a foam roller · IR supine @ 90° and prone @ 0° ◊ ER in hip flexion ◊ Prone IR/ER arcs of motion • PASSIVE ROM (to be done by caregiver) *Patients may wean from caregiver assisted ROM at week 5-6* **EXERCISE PROGRESSION** <u>Weeks 3-4</u> • Prone Assisted Hip Extension (PAHE) • Standing hip abduction (no side lying until 6 weeks post op) with foot slightly internally rotated (WB on uninvolved side only) <u>Weeks 4-6</u> • Prone over swiss ball hip extension • Proximal > distal band progressions of standing hip abduction (WB on uninvolved side only) • Clamshell progressions • Stool IR/ER • Hamstring curl: machine • Supine samurai hip flexor submax iso w/ ball • Stretching: quads, piriformis as tolerated, hamstrings NO HIP FLEXOR!! • Continue BFR protocol as available	**WEIGHTBEARING** • Maintain FF WBing with crutches for weeks 6 **ROM** • Full, but no aggressive hip flexor stretching/hip extension mobilization **BRACE / BOOTS** <u>Dr. Genuario:</u> • Brace is discharged at 3 weeks <u>Dr. Mayer:</u> • De-rotational boots are discharged at 2 weeks **SLEEPING** • No restrictions on sleeping position. Preferred either supine or on surgical side. **OTHER:** • Avoid anterior aggravation / hip flexor irritation • No rotational lumbar/SIJ mobilizations or hip mobilizations • Per SHC policy, no dry needling should be performed in a patient who has had surgery < 6 weeks ag **AS APPROPRIATE, CLEARED TO:** • Experienced swimmers can swim with LE buoy and no flip turns

CRITERIA FOR PROGRESSION (must be met before progression into PHASE III)

1. >75% of passive hip flexion, IR, abduction and extension relative to non-surgical side
2. Glute max prone hip extension x 10 reps/side with proper activation without compensatory patterns/muscle activation

	Time Frame (Weeks)	Guidelines	Precautions
PHASE III	6 to 16	**MANUAL THERAPY** • PROM as needed for full PROM • STM to all areas as appropriate including lumbar spine, hip adductors, hip flexors • Continue Incision mobility • Joint mobilizations as needed for patients lacking ROM and presenting with a capsular restriction inferior and posterior as well as prone mobilization for anterior hip mobility ONLY IF APPROPRIATE • Rotational lumbar and SIJ mobilizations may begin at weeks 6-8 **EXERCISE PROGRESSION** • Supine FABER slides • Prone IR/ER arcs of motion • Bridges double leg progressing to single leg • Quadruped hip extension series • Heel raises • Stationary bike may add resistance • SI balance progression • DL squat progressions • Side plank on knees progressing to full • Heels elevated glut bridges • Glut thrusters: supine off box or tall kneeling with superband resistance • Light dead bug progressions • Forearm planks: start front plank on knees at 6 weeks and progress to full plank once 60 seconds is easy on knees with proper core activation • Leg press double to single leg progressions as tolerated (keeping in mind depth to avoid anterior hip pinching) • TRX DL to split squat progressions • Step up progressions: start with sagittal plane working into lateral and crossover planes • Lunge/split squat progressions starting with ½ depth until tolerance is developed • Monster walks starting with lateral and backwards walking • DL RDL/hip hinge progressions as appropriate form is demonstrated • Progress dead bug range as tolerated, can add band as appropriate • Continue BFR protocol as available	**WEIGHTBEARING** • Weaning from crutches weeks 6-8 • Alter-g as appropriate for gait re-training **PRECAUTIONS** • Continue to avoid any anterior irritation/flare ups that could delay progression • Do not push through pain **AS APPROPRIATE, CLEARED TO:** • Outdoor biking: week 10 but no clips • Light walk for exercise being mindful of distance, grade and surface type • Swimming without pool buoy • Elliptical: week 10 as long as the following criteria are met: ◊ Meet all above criteria for initiation of phase 3 ◊ Full pain-free hip extension ◊ No hip flexor tendon issues/ flare ups

CRITERIA FOR PROGRESSION (must be met before progression into PHASE IV, which includes running)

1. Full PROM in all planes relative to non-surgical side except for FABER which should be >75% (< 3 cm difference) relative to non-surgical side
2. Pain-free MMT of hip abduction (no TFL compensation), hip extension (no lumbar paraspinal or hamstring compensation), external rotator, internal rotator and adductor (no hip flexor compensation) all 5/5 bilaterally
3. Able to maintain forearm plank and side plank on toes x 60s without tenting, doming or holding of breath
4. Pain free, normalized gait x30 min
5. SL squat to 45 degrees of knee flexion without dynamic valgus x 15/side

	Time Frame (Weeks)	Guidelines	Goals
PHASE IV	16 to 20	**MANUAL THERAPY** • Continue as indicated based on patient presentation, ensure full pain-free ROM in all planes **EXERCISE PROGRESSION** • Maintain Hip Stability Program, trunk, hip and lower extremity strength and flexibility program • Single leg front and side plank progressions • Ladder drills: sagittal > frontal > rotational planes • Introduce and progress plyometric program after pain-free ladder drills • May begin return to "SHC Post Op Hip Return to Run Program" (see Appendix 2) at 16 weeks **ONLY IF** all of the above criteria have been met **CLEARED FOR IN APPROPRIATE PATIENT** • Stair Climber @ 16 weeks • Swimming: Breast Stroke kick @ 16 weeks • Golf: Chipping and putting 16 weeks • Light hiking being mindful of grade, surface and duration • Hockey: Return to ice, no shooting 16 weeks	• FABER < 3 cm relative to non-surgical side • Long lever hip flexor 5/5 MMT to decrease risk of tendinopathy with return to run • Pain-free incorporation of return to run progression per SHC protocol once all previous goals/criteria have been met • Drop box jump without valgus to demonstrate appropriate landing form

	Time Frame (Weeks)	Guidelines	Goals
	20+	**MANUAL THERAPY** • Continue as indicated based on patient presentation, ensure full pain-free ROM in all planes **EXERCISE PROGRESSION** • Continue more sport specific/patient-goal specific with continued emphasis on CKC glut/core progressions • Field drills, multi-planar • Must pass hip return to sports test prior to clearance to play, (typically at 24+ weeks post-op) **CLEARED FOR IN APPROPRIATE PATIENT (AT 20+ WEEKS AS CRITERIA ARE MET):** • More strenuous hiking • Golf: driving, possibly executive/short courses • Soccer/lax: ball drills and stick work • Hockey: shooting	• Pain-free progression of return to run progression with ability to tolerate 15 minutes of running consecutively without pain/irritation • Pass hip RTS test • Unrestricted return to activity