# ARTHROSCOPIC LABRAL REPAIR WITH CAPSULAR REPAIR/CLOSURE PHYSICAL THERAPY PROTOCOL

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**Please use appropriate clinical judgment during all exercise progressions. The specific exercises given in this protocol are provided for guidance, but it is important to use clinical judgment when determining appropriate progressions within the physician-provided WBing and ROM restrictions. Any questions/concerns, please do not hesitate to contact Dr. Laskovski's office at 330-644-7436 or CCOC Green PT at 330-644-5461.**

**OPERATIVE DIAGNOSIS:** Please ALWAYS refer to the operative note for a comprehensive description of the procedure performed. There is a separate protocol for:

- Labral repair with capsular repair/closure
- Labral repair with capsular plication
- Gluteus medius/minimus repair: If the patient also had a gluteus medius and/or minimus repair, disregard the labral repair protocol and follow the gluteus medius protocol, as it is more restrictive.

** If the patient had a microfracture, they will be non-weight bearing (NWB) for the first 6 weeks post-op and NOT allowed to do foot flat weight bearing (FFWB).

**WEIGHTBEARING:** The patient is to begin FFWB immediately post-op. The patient is NWB for the first 2 full weeks post-operatively. Partial weight bearing (PWB) with bilateral crutches or walker begins at 3 weeks, and the patient may progress to a unilateral crutch at 4 weeks if pain levels are low and there is minimal gait deviation. If clinically appropriate, the patient may progress to ambulation without an assistive device (AD) at 5 weeks post-op.

- **Please Note:** FFWB should be done immediately post-op to avoid anterior hip irritation caused by holding the hip in flexion and to normalize the gait pattern as much as possible, but it is important to note that there is still no weight bearing until week 3 post-op. The patient should be instructed to set his/her foot on the floor without putting weight on it. The script will state if weight bearing restrictions vary from this.

# Phase I – Immediate Rehabilitation (weeks 0-4)

- Patients will be issued a home exercise program (HEP) when they go to crutch training.
- They are to begin this HEP post-op day 1. This will include:
    - Hip circumduction (passively with assist)
    - Frequent prone lying/"tummy time"
    - Ankle pumps
    - Calf stretching
    - Submaximal and pain free glute, quad and abdominal isometrics
- Formal PT will begin 1 week post-op unless otherwise specified by Dr. Laskovski.

**Goals:**
- Protect repaired tissue
- Restore ROM within guidelines and avoid capsular adhesions
- Diminish pain and inflammation
- Teach caregiver to perform circumduction at least 1-*2*x day
- Normalize gait pattern with and without assistive device
- Initiate neuromuscular re-education to reduce compensatory patterns
- Educate patient on realistic expectations including timeframe of recovery, return to sport/activity, long-term outcomes and pain (hurt vs. harm)

**Precautions:**
**DO NOT AGGRESSIVELY PUSH THROUGH PAIN/PINCHING
**Gentle stretching will gain more ROM
**NO STRAIGHT LEG RAISES

**Considerations**:
- Scar massage, desensitization
- Modalities for pain control and swelling as appropriate
- Routinely assess the following areas and treat as needed: TFL, ITB, psoas, iliacus, hip abd/adductors, piriformis, quadratus lumborum, paraspinals, plantar fascia

**PROM Restrictions:**
- Flexion: within tolerance
- Extension: 0 degrees x 3 weeks
- Abduction: 25-30 degrees x 3 weeks
- IR: 0 degrees x 3 weeks (IR can be assessed at the first visit, but do not begin doing repetitions until 3 weeks post-op except with log-roll in pain free range)
- ER: 30 degrees x 4 weeks
- After 4 weeks – ROM as tolerated

**Initial Exam Suggestions:**
- Measure **NON-OP Hip**:
    - Seated AROM hip IR, ER; supine AROM hip flexion; supine PROM hip flexion, IR, ER
- Measure **OP-Hip:**
    - PROM supine hip flexion, ER (limit 30 degrees), IR (baseline measurement only until 3 weeks)
- Manual Treatment: hip circumduction with gentle long-axis traction and in ~60 degrees of flexion (for circulating synovial fluid and, therefore, cartilage health), gentle long-axis traction with PROM abduction, PROM flexion and PROM ER – all in PAIN/PINCH FREE ranges of protocol limits

- HEP given at initial evaluation:
    - Review and continue with initial HEP patient started at home (see above)
    - Review circumduction for home, either passively in long-axis traction and varying degrees of pain-free flexion, or off edge of step if patient does not have someone to assist them at home
    - Instruct in FFWB
    - Supine heel slides
    - Seated hamstring stretch
    - Half-range bent knee fall out
    - Submaximal and pain free isometrics for hip abduction, hip adduction, hip flexion
    - SAQ, LAQ
    - Educate on breathing techniques for relaxation, coordinated with exercise/movement

**Week 2:**
- Continue with previous exercises as mentioned above and hip PROM within protocol limits
- Initiate stationary bike for ROM in PT and at home if patient has access (1-2x/day for 20 minutes). Maximize seat height to avoid hip flexor irritation.
- **Exercise additions**: single knee to chest stretch, transverse abs + alternating march, dead bugs, prone TKEs and prone TKE + glute set, introduce quadruped progressions: rocking, anterior-posterior pelvic tilts, cat/cows, gentle child's pose stretch

**Week 3:**
- Continue with previous exercises as mentioned above and hip PROM within protocol limits; maintain ER to 30 degree limit, all other planes are within tolerance
- **Exercise additions:** hip flexor stretch off edge of table (assist in getting in/out of stretch as needed to avoid psoas irritation), prone hip extension with correct motor pattern, standing hip extension and abduction (OKC operative leg only), low cobras
- **Gait training:** At post-op week *3*, begin PWB with bilateral crutches or walker; emphasize normal gait pattern; instruct in standing weight shifts within tolerance

# Phase II – Intermediate Rehabilitation (weeks 4-12)

**Criteria for progression to Phase II:**
- Pain levels are low with minimal muscular irritation
- ROM is progressing at an appropriate rate
- If there are concerns regarding a patient's progress and you feel they are not yet appropriate to progress to phase II at 4 weeks, please inform Dr. Laskovski and hold on phase II until their 6-week follow-up appointment

**Goals:**
- Protection of repaired tissue
- Reduce pain and inflammation
- Restore full hip ROM – **ROM must come before strengthening**
- Restore normal gait pattern without assistive device
- Progressive strengthening of the hip, pelvis and lower extremities
- Emphasize proper mechanics and lumbopelvic stability throughout phase II

**Precautions:**
- No forced/aggressive stretching of any muscles

- Avoid inflammation of hip flexor, adductor, abductor, IT-band and piriformis
- ** If patient experiences a flare up: focus on ROM, stretching, manual therapy, modalities for pain and inflammation, gluteal firing patterns, and continue with non-painful strengthening as tolerated. Do not push through pain **

**Week 4:**
- Continue with hip PROM, now all planes within tolerance
- Continue with phase I stretches to maintain ROM/flexibility throughout phase II, as patients will often tighten as they gain strength
- **Exercise additions:** slowly progress to full-range bent knee fallout, prone IR/ER, bridges, LE reverse curl with adductor isometric, mini squats, standing heel raises
- Introduce kneeling progressions: kneeling, tall kneeling, kneeling to tall kneeling transitions

**Week 5:**
- Progress to FWB with minimal pain, minimal gait deviations prior to initiating full weight bearing strengthening
- Avoid SLRs initially, but DON'T avoid other forms of psoas strengthening; consider: step taps, step ups, prone planks, reverse curls, dead bug pulls, progressive core engagement/isometric techniques, eccentric strength in side lying → supine → standing
- Quadruped progressions: donkey kicks, fire hydrants, bird dogs, belly slaps
- Continue stationary biking, increasing resistance as tolerated

**Weeks 6-12:**
- At 6 weeks, initiate FABER stretch to tolerance and piriformis stretch (modified to keep non-op foot on table)
- Continue strengthening, proprioceptive, and weight bearing exercises as tolerated; consider: clams, forward step ups, lateral step ups, balance, medial step down/tap down
- **Squat progression:** shallow squatting, hip hinge → Total Gym double leg squat → standing free squat → deadlift → weighted front hold squat → RDL
- Kneeling progressions: tall kneel to half kneel, kneel to half kneel, airplane progressions
- Elliptical can be initiated at 8 weeks for patients with very low pain levels who are no longer challenged by the bike
- Focus on core and gluteus medius/maximus strength to help improve alignment in SLS and to avoid common pre-operative FAI movement patterns (i.e. femoral IR, knee valgus, foot/ankle pronation)

# Phase III – Advanced Rehabilitation/Return to Sport

**Criteria for progression to Phase III:**
- AROM symmetrical to non-operative side
- Normalized gait pattern
- Hip flexor strength ≥4+/5
- Hip abduction, adduction, extension, ER and IR strength of ≥4+/5
- SLS balance 30 seconds without LOB
- Medial tap down without valgus collapse

**Goals:**
- Full (5/5)/Symmetrical muscular strength
- Restoration of pre-operative cardiovascular endurance

**Precautions:**

- No contact activities
- No stretching into pain or pinch
- Use clinical judgement to determine if jump/hop/jog training is appropriate for patient's lifestyle and goals
- Use clinical judgement on progression of the following based on how patient is doing

**Weeks 10-12:**

- **Continued squat progression** (Functional Test: Star Excursion Balance; Single leg squat test)
    - Double leg free squat/deep squat → Weighted double leg squat or deadlift → Double leg squat on unstable surface → Single leg mini squat on Total Gym with partial weight → Single leg mini squat in standing → Lunges in all directions → Single leg squat within controllable range → single leg squat on unstable surface

**Weeks 12-18:**

- **Jump Progression** (Functional Test: 10 sec tuck jump)
    - Double leg hop on total gym with partial weight → Double leg hop on trampoline → Double leg hop on hard surface → Double leg vertical jump → Double leg tuck jump with controlled landing and even weight distribution
    - Depth jumps off of block
    - Box Jumps with even weight distribution
- **Hop Progression** (Functional Test: Hop tests x 4)
    - Single leg hop in place (vertical→ forward/backward over line→side to side over line)
    - Single leg hop for distance
    - Triple hop for distance
    - Consecutive single leg forward hops
    - Consecutive single leg cross over hops
    - Max controlled leap taking off from non-op leg and landing on operative leg
- **Jog Progression**
    - **Complete the following with good technique and without pain *prior* to adding jogging:
        - Elliptical with resistance
        - Slide board 50% max speed → full speed
        - Carioca
        - Ladder drills (lateral, anterior, z cuts)
        - Standing resisted single leg march with controlled eccentric lowering
    - Walk to Run Progression
        - **Phase I**: Run 1 minute, Walk 1-5 minutes, Repeat 2x
        - **Phase II**: Run 2 minute, Walk 1-4 minutes, Repeat 2x
        - **Phase III**: Run 3 minute, Walk 1-3 minutes, Repeat 2x
        - **Phase IV**: Run 4 minute, Walk 1-2 minutes, Repeat 2x
        - **Phase V**: Run 5 minute, Walk 1 minutes, Repeat 2x

****Complete each phase for 2 days. Do not progress to the next phase if you experience an exacerbation of pain****

Source:https://osuwmcdigital.osu.edu/sitetool/sites/sportsmedicinepublic/documents/rehab_protocols/2012_return_to_running_basic.pdf