

ARTHROSCOPIC LABRAL REPAIR WITH CAPSULAR PLICATION PHYSICAL THERAPY PROTOCOL

Jovan R. Laskovski, M.D.

Hip Arthroscopy Sports Medicine & Orthopaedic Surgery Crystal Clinic Orthopaedic Center

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 <u>ALWAYS</u> refer to the operative note for a comprehensive description of the procedure performed. There is a separate protocol for:

- Labral repair
- 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, the patient will be non-WBing for the first <u>6 weeks</u> (Not <u>allowed</u> to do foot flat weight bearing at 2 weeks post-op).

WEIGHTBEARING: The patient is non-WBing for the first 4 weeks post-operatively. The patient may begin FFWB (foot flat WB) as directed below at 2 weeks post-op. PWB with bilateral crutches or walker begins at 4 weeks, and the patient may progress to a unilateral crutch at 5 weeks if pain levels are low and there is minimal gait deviation. If clinically appropriate, the patient may progress to ambulation without an AD at 6 weeks post-op.

• **Please Note:** FFWB should be done at 2 weeks postoperatively to avoid anterior hip irritation caused by holding the hip in flexion, <u>but it is important to note that there is still no weight bearing until 4 weeks post-op</u>. 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 1-4)

Begin therapy post-operative day #10-14

<u>Goals:</u>

- Protection of repaired tissue
- Restore ROM within guidelines
- Prevent muscular inhibition and gait abnormalities
- Diminish pain and inflammation
- Teach caregiver to perform circumduction 1x/day as appropriate

Precautions:

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

PROM Restrictions:

- Flexion: within tolerance
- Extension: 0 degrees x 4 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)
- ER: 0 degrees x 4 weeks, then gently progress in pain free ranges
- 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, IR (PROM IR should not be initiated until 3 weeks, but it is good to get a baseline measurement)
- Manual Treatment: circumduction (for circulating synovial fluid and, therefore, cartilage health), gentle PROM abduction, PROM flexion in PAIN/PINCH FREE ranges
- HEP given at initial evaluation: seated hamstring stretch, single knee to chest, prone quad stretch, quad sets, gluteal sets, ankle pumps

Weeks 1-2:

- See guidelines for Initial Exam
- **Manual Considerations**: scar massage, TFL, ITB, psoas, iliacus, hip adductors, piriformis, quadratus lumborum, paraspinals
- Modalities for pain control and swelling as appropriate

Weeks 3-4:

- **PROM** to hip within ROM guidelines avoid pain/pinch: circumduction, PROM gentle abduction and flexion; add IR at 3 weeks and extension and ER at 4 weeks
- Consider adding stationary bike without resistance at 3 weeks, maximizing seat height to avoid psoas irritation
- Exercises: to be progressed depending on how patient is doing: SAQs, transverse abs isometrics, hip abduction and adduction isometrics; at 4 WEEKS post-op, add bent knee fallout stretch
- Gait training: at post-op WEEK 4, begin PWB with bilateral crutches or walker
- **Manual Considerations**: scar massage, TFL, ITB, psoas, iliacus, hip adductors, piriformis, quadratus lumborum, paraspinals
- Modalities for pain control and swelling as appropriate

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

<u>Goals:</u>

- Protection of repaired tissue
- Restore full hip ROM **ROM must come before strengthening**
- Restore normal gait pattern
- Progressive strengthening of the hip, pelvis and lower extremities

Precautions:

- Progress to a unilateral crutch at 5 weeks if pain levels are low and there is minimal gait deviation. If clinically appropriate, the patient may progress to ambulation without an AD at 6 weeks postoperatively.
- No forced/aggressive stretching of any muscles
- Avoid inflammation of hip flexor, adductor, abductor, and piriformis

Weeks 4-12:

- Continue PROM as needed. Continue phase I stretches to maintain ROM/flexibility throughout strengthening, as patients will often tighten as they gain strength.
- At 6 weeks post-op, add piriformis and FABER stretches
- Progress to FWB with minimal pain and minimal gait deviations prior to initiating full weight bearing strengthening.

- Stationary biking: increase resistance as tolerated. Elliptical can be initiated at week 8 for patients with very low pain levels who are no longer challenged by the bike.
- Initiate strengthening and proprioceptive exercises. Progress into weight bearing exercises as tolerated. Consider: clams, bridges, shallow squatting, step ups, lateral step ups, balance, medial step down, etc.
- Avoid SLR initially due to potential psoas irritation. Consider other forms of psoas strengthening: step ups, isometric straight leg holds, marching in hooklying, prone planks, steamboats, etc.
- 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).
- ** If patient experiences a flare up: focus on ROM, stretching, manual therapy, transverse abs, gluteal firing patterns, and continue with non-painful strengthening as tolerated. Do not push through pain**

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 $\geq 4/5$
- Hip abduction, adduction, extension, ER and IR strength of $\ge 4+/5$
- SLS balance 30 seconds without LOB
- Medial tap down without valgus collapse

<u>Goals</u>:

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

Precautions:

- Use clinical judgement to determine if lunge/jump/hop/jog training appropriate for patient lifestyle and goals
- No contact activities
- No stretching into pain or pinch

Exercises Weeks 12-18:

- **Squat progression** (Functional Test: Star Excursion Balance Test or Single leg squat test)
 - Double leg press → Double leg squat → 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
- 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

• Jog Progression

- Complete the following with good technique and without pain prior to adding jogging:
 - Ladder drills (lateral, anterior, z cuts)
 - Carioca
 - Slide board 50% max speed \rightarrow full speed
 - Elliptical with resistance
- 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/20 12_return_to_running_basic.pdf

Revision approved by Dr. Laskovski 5-31-17