

# Rehabilitation s/p Hip Arthroscopy, Femoro/Acetabuloplasty with or without Labral Repair

Saint Louis University – SSM Health Physical Therapy Orthopedic Residency  
in Collaboration with SLUCare Physicians



**SLUCare**<sup>®</sup>  
Physician Group

## Physician Referral for Physical Therapy

Patient Name:

Date:

Referring DX: S/P Hip Arthroscopy

Recommended Frequency: 1 – 2 visits/ wk

Total Duration: ~4 months

*These guidelines, treatments, and milestones have been established to assist in guiding rehabilitation based on the most current available evidence. They are not intended to be a substitute for sound clinical judgement with consideration of the individual contextual features of the patient and the demands of various functions/sports.*

### Weeks 0 – 6 Protective/Inflammatory Phase

Recommend PT follow up: 1-2 times per week

**Milestone to advance to next phase:** Full PROM of hip by 2 weeks, D/C of crutches with a non-antalgic gait pattern, controlled pain, and inflammation

### Precautions for iliopsoas tendonitis and protection of surgical site:

- Avoid combined motions and excessive flexion.<sup>1,2</sup>
- Avoid early activation of iliopsoas.<sup>3,4</sup>
- Avoid toe touch weight bearing during WBAT with utilization of crutches.<sup>1,2,5,6</sup>

### Recommendations:

- Begin to wean off of crutches at week 3 and progress towards non-antalgic gait pattern with use of crutches, then full weight bearing.<sup>1,2,5,6</sup>
- Initiate HEP prescription:
  - Weeks 1-2
    - Isometrics in all planes with exception of hip flexion
  - Weeks 3-4
    - Isotonics in all planes with exception of hip flexion, initiate hip flexion isometric
- Instruction in total body conditioning program including: LE flexibility, hip/ankle strengthening, core strengthening, non-operative limb conditioning.
- Aerobic conditioning on an upright bike or recumbent bike with reclined back rest.
- Proprioception and balance training:
  - Double limb → Single limb (without compensatory patterns)
- Administer patient reported outcome measures:
  - Modified Harris Hip Score (mHHS)
  - Hip Outcome Score-Sports Specific Subscale (HOS-SSS)
  - International Hip Outcome Tool (iHOT-12)

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- Coping Mechanism Evaluation (Brief COPE)

## **Weeks 4 – 10 Foundational Strengthening**

*Recommend PT follow up: 2 times per week*

**Milestones to proceed to next phase:** Ability to perform 10 repetitions of body weight double leg squat and 30 seconds single leg stance on compliance surface without compensatory patterns

### Precautions for iliopsoas tendonitis:

- Avoid isotonic hip flexion until 8 weeks post-op.

### Recommendations:

- Initiate CKC activities without compensatory femoral adduction with medial rotation, ankle pronation, and excessive anterior translation of tibia.<sup>7,8,9:</sup>
  - Double limb squat
  - Lateral side stepping
  - Step up/down → Lateral step down → Forward step down
- Begin proprioception and balance training:
  - Double limb → Single limb → Compliant surfaces
- Aerobic conditioning on stationary/recumbent bike

## **Weeks 6-12 Strengthening**

*Recommend PT follow up: 2 times per week*

### **Milestone to proceed to plyometric program in next phase:**

- Perform single leg press of involved limb >80% (10 rep max) compared to uninvolved side.
- Ability to perform a full, free-weight squat 1.5 to 2.5 times body mass and/or squat 60% of body mass 5 times within 5 seconds.<sup>10</sup>
- 10 forward and lateral step downs from 8" step without compensatory patterns.<sup>11,12</sup>

### Precautions for iliopsoas tendonitis:

- Avoid initiating isotonic hip flexion until 8 weeks, post-op.

### Recommendations:

- Aerobic conditioning on stationary/recumbent bike, may initiate elliptical.<sup>13</sup>
- Continue to progress CKC strengthening and progressive resistance exercise following the Soreness Rules.
- Progression of single leg strengthening
  - Squat → Lunge (frontal and sagittal planes) → Single leg squat
- Progress proprioception and balance training
  - Single leg activities that involve UE and cervical spine movement
  - With challenging the somatosensory, vestibular, and visual system

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- With incorporation of environmental distractions

### Recommended Functional Tests:

- Y-Balance<sup>14</sup>

### Weeks 12+ (Initiation of sports activity)

*Recommend PT follow up: 2 times per week*

#### **Milestone to progress to next phase:**

- Ability to perform single leg plyometrics without symptoms or compensatory patterns
- Ability to perform sport specific drills at full speed

### Recommendations:

- Initiate plyometric program (see above criteria)
  - Emphasis on proper takeoff and landing mechanics<sup>15</sup>
  - Drop jump
- Begin running progression when able to perform 200-250 plyometric foot contacts without reactive pain or effusion<sup>16</sup>
  - May utilize Track or Treadmill Running Programs (see below)
  - Adherence to Soreness Rules (see below)
  - Progress distance/time prior to progressing speed
  - Progression of running load 10% weekly is recommended, avoiding progression >30%.<sup>17</sup>
- Sport specific drill training
  - Moderate speeds → High speed
  - Singular plane → Multiplanar

### Discharge Criteria:

- Patient reported outcome score:
  - Modified Harris Hip Score (mHHS)
  - Hip Outcome Score-Sports Specific Subscale (HOS-SSS)
  - International Hip Outcome Tool (iHOT-12)
  - Coping Mechanism Evaluation (Brief COPE)
- No pain during activities of daily living and during sport specific activities (if goal is to return to sports)
- Perform single leg press of involved limb >90% (10 rep max) compared to uninvolved side.

**For questions regarding the patient's medical care, new orders, or insurance questions:**  
please contact your physician's office directly

**For additional questions, comments, or concerns regarding the implementation of these physical therapy guidelines,** please contact Chris Sebelki, PT, DPT, PhD, OCS, Director of the SLU – SSM Health Physical Therapy Residency @ 314 977 8724 OR [chris.sebelki@health.slu.edu](mailto:chris.sebelki@health.slu.edu)

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Please respond to our anonymous survey regarding these guidelines to assist in improving patient care and advocacy. [https://slu.az1.qualtrics.com/jfe/form/SV\\_bpX7Z9AaVTzGblj](https://slu.az1.qualtrics.com/jfe/form/SV_bpX7Z9AaVTzGblj)



### Appendices of referenced assessments:

<b>Criteria for compensatory movement patterns during CKC activities.</b> <sup>11,12</sup> Adapted from McGovern 2018 & Rabin 2010
Overall impression of movement: balance, gross arm deviation
1. Trunk movement (forward lean, lateral rotation, lateral flexion, thoracic rotation).
2. Posture of the pelvis (tilt or rotation)
3. Posture of the hip joint (adduction or internal rotation)
4. Posture of knee (knee valgus or tremor)
5. Depth of squat (as appropriate to the individual)
<b>Scoring Criteria:</b> Total of 4 out of 5 specific criteria must be negative for deviation.

<b>Soreness Rules</b> <sup>18</sup> Adapted from Fees et al. 1998	
Criterion	Action
1. Soreness during warm-up that continues	2 days off, drop down 1 step
2. Soreness during warm-up that goes away	Stay at step that led to soreness
3. Soreness during warm-up that goes away from redevelops during session	2 days off, drop down 1 step
4. Soreness the day after lifting (not muscle soreness)	1 day off, do not advance program to the next step
5. No soreness	Advance 1 step per week or as instructed by healthcare professional

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	<b>Track Running Program</b> <sup>19</sup> Adapted from University of Delaware Physical Therapy Clinic	<b>Treadmill Running Program</b> <sup>19</sup> Adapted from University of Delaware Physical Therapy Clinic
<b>Level 1</b>	Jog straights / Walk Curves (2 miles total)	0.1 mile walk /0 .1 mile jog (repeat 10 times)
<b>Level 2</b>	Jog straights / Jog 1 curve every other lap	Alternate 0.1 mile walk /0 .2 mile jog (2 miles total)
<b>Level 3</b>	Jog straights / Jog 1 curve every lap	Alternate 0.1 mile walk /0 .3 mile jog (2 miles total)
<b>Level 4</b>	Fast walk 1 ¼ lap / Walk curve	Alternate 0.1 mile walk / 0.4 mile jog (2 miles total)
<b>Level 5</b>	Jog all laps	Jog 2 miles
<b>Level 6</b>	Increase workout to 2 ½ miles	Increase workout to 2 ½ miles
<b>Level 7</b>	Increase workout to 3 miles	Increase workout to 3 miles
<b>Level 8</b>	Increase speed on straights / Jog curves	Alternate between running / jogging every 0.25 miles
<ul style="list-style-type: none"> <li>● Mandatory 2 day rest between workouts for the first two weeks.</li> <li>● Do not advance more than 2 levels per week.</li> <li>● Two days rest is mandatory between levels 1, 2, and 3 workouts.</li> <li>● One day rest is mandatory between levels 4-8 workouts.</li> <li>● Adhere to soreness rules</li> </ul> <p style="text-align: center;"><b>This Clinical Guideline may need to be modified to meet the needs of a specific patient. The model should not replace clinical judgment.</b></p>		

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