

# LABRAL REPAIR WITH CAPSULAR SHIFT CLINICAL PRACTICE GUIDELINE

## Rehabilitation Protocol

### Contact Information:

- For questions, contact Dr. Sujan Gogu's clinic.

### Progression:

- Time and criterion-based, considering soft tissue healing, patient demographics, and clinician evaluation.

### Rehabilitation Precautions

#### Weight Bearing

1

- As tolerated.
- Discontinue assistive device within the first 2-3 weeks as gait mechanics normalize.

#### Range of Motion

2

- Flexion within pain-free range, avoiding anterior impingement.

#### Anterior Repair

3

- Extension and external rotation within pain-free range, no overpressure.

#### Posterior Repair

4

- Flexion, adduction, and internal rotation within pain-free range, limit overpressure.
- Use both weight-bearing and non-weight-bearing mobility techniques.
- Chondroplasty procedures follow the same parameters.

5

**Bracing**

- No post-operative bracing unless specified by the surgeon.

6

**Other Precautions**

- Avoid pushing through hip flexor pain/inflammation.
- No ballistic or forced stretching.

**PHASE -I**

**Initial Exercise Goals**

- Protect the integrity of repaired tissue.
- Restore ROM within restrictions.
- Reduce pain and inflammation.
- Prevent muscular inhibition.

**Weeks 0-4**

**Range of Motion (ROM)**

**Passive hip circumduction:**

- First post-op visit until gait is normal and pain-free.
- 5 min clockwise/counterclockwise each at slight flexion (10 min total).
- 5 min clockwise/counterclockwise each at 30 degrees flexion (10 min total).
- "Belly time": Lie prone twice a day for 20 minutes.
- Stationary bicycle with minimal to no resistance.

**Aquatic ambulation:**

- Emphasize neutral ambulation to avoid capsular stretch at week 3.
- Standing pendulum swings.
- Active-assistive range of motion in all directions.

	<ul style="list-style-type: none"> <li>• Prone prop hip flexor stretch, progressing to half-kneeling hip flexor stretch at week 3.</li> </ul> <p><b>Posterior capsule stretching</b></p> <ul style="list-style-type: none"> <li>• Quadruped rocks.</li> </ul>
<b>Manual Therapy</b>	<ul style="list-style-type: none"> <li>• Iliopsoas release</li> </ul>
<b>Strengthening</b>	<ul style="list-style-type: none"> <li>• <b>Glute activation:</b> Prone hip extension over ball/pillows (focus on isolating glutes, avoid knee flexion).</li> <li>• Isometric contraction of quadriceps, gluteals, transverse abdominis, hamstrings.</li> <li>• Isometric contraction of hip abduction and adduction, prone internal rotation (IR) and external rotation (ER).</li> <li>• <i>At week 2-3:</i> Straight leg raises (SLR) in extension, abduction, and adduction</li> <li>• Supine bridging (with or without theraband).</li> <li>• <i>At week 3:</i> Clamshells (supine and sidelying)</li> <li>• Leg Press/Shuttle with low resistance.</li> </ul>
<b>Criteria for Progression to Next Phase</b>	<ol style="list-style-type: none"> <li>1. Decrease in edema.</li> <li>2. Minimal pain with exercises.</li> <li>3. Normalized gait.</li> <li>4. ROM <math>\geq</math> 75% of the uninvolved side.</li> <li>5. Proper muscle activation for initial exercises.</li> </ol>
<b>Weeks 4-6</b>	
<b>Range of Motion (ROM)</b>	<ul style="list-style-type: none"> <li>• Continue with stationary bike.</li> <li>• Continue with mobility exercises.</li> <li>• Manual Therapy (long axis distraction and anterior/posterior mobilizations).</li> </ul>
<b>Manual Therapy</b>	<ul style="list-style-type: none"> <li>• Iliopsoas release.</li> <li>• Grade III multi-angle joint mobilizations with and without</li> </ul>

	movement.
<b>Strengthening</b>	<ul style="list-style-type: none"> <li>• Double leg mini squats.</li> <li>• Progressive trunk and lumbopelvic strengthening.</li> <li>• Bridging with swiss ball.</li> <li>• Side abdominal bridge.</li> <li>• Functional weight-bearing strengthening.</li> <li>• Leg Press/Shuttle progression to single-leg strengthening.</li> <li>• Terminal knee extensions (TKEs).</li> </ul>
<b>Criteria for Progression to Next Phase</b>	<ol style="list-style-type: none"> <li>1. Ability to perform single-leg stance.</li> <li>2. Normalized gait without assistive device.</li> <li>3. No pain with exercises.</li> <li>4. Full range of motion.</li> </ol>

<b>Phase II – Intermediate Phase (Weeks 6-8)</b>	
<b>Goals</b>	<ul style="list-style-type: none"> <li>• Protect the integrity of the repaired tissue.</li> <li>• Restore range of motion (ROM).</li> <li>• Gradually increase muscle strength and proprioceptive retraining.</li> <li>• Emphasis on enhancing rotational strength and stability.</li> </ul>
<b>Range of Motion (ROM)</b>	<ul style="list-style-type: none"> <li>• Continue using the stationary bike.</li> <li>• Use stair-climber or upright elliptical for ROM and endurance.</li> </ul>
<b>Strengthening Exercises</b>	<ul style="list-style-type: none"> <li>• Partial range lunges.</li> <li>• Single leg balance exercises.</li> <li>• Sidestepping with resistance.</li> <li>• Step downs (heel touch).</li> <li>• Single knee bends.</li> <li>• Single leg cord rotations.</li> </ul>

	<ul style="list-style-type: none"> <li>• Single limb balance on a dynadisc.</li> <li>• Mini-squats on a BOSU ball.</li> </ul>
<b>Criteria for Progression to Next Phase</b>	<ol style="list-style-type: none"> <li>1. Improved functional strength and endurance without symptom exacerbation.</li> <li>2. Full, pain-free ROM.</li> <li>3. Hip flexion strength &gt; 60% of the uninvolved side.</li> <li>4. Hip adduction, abduction, extension, internal rotation (IR), and external rotation (ER) strength &gt; 70% of the uninvolved side.</li> </ol>

<b>Phase III – Advanced Rehabilitation (Weeks 8-12)</b>	
<b>Goals</b>	<ul style="list-style-type: none"> <li>• Restore muscular strength and endurance.</li> <li>• Restore cardiovascular endurance.</li> <li>• Optimize neuromuscular control, balance, and proprioception.</li> </ul>
<b>Range of Motion (ROM)</b>	<ul style="list-style-type: none"> <li>• Continue with previous exercises and include stretching.</li> </ul>
<b>Strengthening Exercises</b>	<ul style="list-style-type: none"> <li>• Progress single limb balance on unstable surfaces.</li> <li>• Progress lower extremity (LE) and trunk strengthening from stable to unstable surfaces (include rotational components): <ul style="list-style-type: none"> <li>➤ Squat progression (double leg to single leg).</li> <li>➤ Chops and lifts (half kneeling, tall kneeling, lunge).</li> </ul> </li> <li>• Focus on proper alignment during landing mechanics.</li> <li>• Sport cord jogging.</li> <li>• Begin shuttle plyometrics: <ul style="list-style-type: none"> <li>➤ Progress from bilateral to single LE.</li> <li>➤ Progress from straight plane to rotational component.</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• Initiate walking-jogging progression.</li> <li>• Swimming (avoid rotational kicks).</li> </ul>
<b>Criteria for Progression to Next Phase</b>	Perform plyometrics without exacerbation of symptoms.
<b>Weeks 12-18</b>	
<b>Range of Motion (ROM)</b>	Continue exercises within tolerance, including pre-exercise warm-up.
<b>Strengthening</b>	<ul style="list-style-type: none"> <li>• Maintain neuromuscular strengthening with a focus on hip and pelvic stability.</li> <li>• Progress jogging routine.</li> <li>• Perform full weight-bearing (FWB) plyometric exercises.</li> <li>• Start multi-directional agility drills and sport-specific exercises.</li> </ul>
<b>Criteria for Progression to Next Phase</b>	<ol style="list-style-type: none"> <li>1. Ability to perform sport-specific drills at moderate speed without pain.</li> <li>2. Hip flexion strength &gt; 70% of the uninvolved side.</li> <li>3. Hip abduction, adduction, extension, internal rotation (IR), and external rotation (ER) strength &gt; 80% of the uninvolved side.</li> <li>4. Complete functional sport test: <ul style="list-style-type: none"> <li>➤ Achieve 3 cross-over hop test for distance within 15% of the uninvolved limb.</li> </ul> </li> <li>5. Demonstrate proper technique in initial agility drills.</li> </ol>
<b>3-6 Months</b>	
<b>Sport-Specific Training</b>	<ul style="list-style-type: none"> <li>• Engage in sport-specific drills: <ul style="list-style-type: none"> <li>○ Carioca, Z-cuts, W-cuts, Ghiardelli's, etc.</li> </ul> </li> <li>• Undergo functional testing.</li> </ul>

**Criteria for Full Return to Sport**

1. Obtain physician clearance at the final check-up.
2. Achieve hip strength  $> 85\%$  compared to the uninvolved side.
3. Show significant improvement in the outcome questionnaire.
4. Ability to perform sport-specific drills at maximum speed without pain.