

# **Hip Arthroscopy-Subchondroplasty Post-Operative Rehabilitation Protocol**

### 0-1 Week

# **Weight Bearing Status:**

- Non-weight bearing (NWB) for 6-8 weeks.
- Provide instructions for using crutches to assist with ambulation and stairs.

# **Suggested Therapeutic Exercises:**

- Stationary Bike (no resistance):
  - 20 minutes daily.
- Continuous Passive Motion (CPM):
  - 4 hours per day (can reduce to 3 hours if using the stationary bike).
- Post-op Brace Instructions:
  - Wear the brace at all times during ambulation.
  - Use the brace or an abduction pillow for sleep for the first 2 weeks.
- Passive Range of Motion (PROM):
  - o Begin PROM exercises (circumduction, abduction, log rolls).
  - o Perform for 20 minutes, twice daily.
  - o Provide instructions to a family member or caregiver for assistance.
  - Maintain PROM restrictions for 3 weeks.
- Prone Lying:
  - 2-3 hours per day.
- Isometric Exercises (quad sets, glute sets, TA activation):
  - o Hold for 5 seconds, repeat 20 times, twice daily.

### 1-3 Weeks

# Goal:

Protect the joint and prevent irritation.

#### PT Guidelines:

- Aim for symmetrical range of motion (ROM) by 6-8 weeks.
- Avoid active open-chain hip flexor activation.
- Focus on proximal control.
- Manual therapy (20-30 min/session).

# **Weight Bearing Status:**

NWB for 6-8 weeks.

## **Brace Settings:**

- Lock the brace at 0-90° for ambulation or sleeping.
- Use either the brace or an abduction pillow during sleep.

## Initial PROM Restrictions (Weeks 0-3):

- **Flexion:** Limited to 90° for 2 weeks (can exceed in CPM).
- Extension: Limited to 0° for 3 weeks.
- External Rotation: Limited to 30° at 90° of hip flexion for 3 weeks.
- Internal Rotation: Limited to 20° in prone position for 3 weeks.
- **Abduction:** Limited to 20° at 90° of hip flexion for 3 weeks.
- **Prone Position:** No limitations.

## **Suggested Therapeutic Exercises:**

- Stationary Bike: 20 minutes daily, increase time after week 3 if tolerated.
- **Soft Tissue Mobilization:** 20-30 minutes per session, focusing on adductors, TFL, QL, and inguinal ligament.
- **Isometrics:** Quad sets, glute sets, TA activation (weeks 1-2).
- Diaphragmatic Breathing: Weeks 1-2.
- Quadruped Exercises: Rocking, pelvic tilts, arm lifts.
- Anterior Capsule Stretches: Surgical leg off table/figure 4.
- Clamshells/Reverse Clamshells: Weeks 1-3.
- TA Activation with Bent Knee Fallouts: Weeks 1-3.
- **Bridging Progression:** 5x/week (weeks 2-6).
- **Prone Hip ER/IR, Hamstring Curls:** 5x/week (weeks 2-6).

#### Goal:

Achieve a non-compensatory gait and gradual progression.

### PT Guidelines:

- Gradually progress ambulation without crutches or brace as tolerated, avoiding compensatory patterns.
- Encourage non-compensatory gait patterns using tactile and verbal cues.
- Progress exercises only once good control (both proximally and distally) is achieved in prior exercises.
- Hold all weight-bearing exercises until week 6.

## **Weight Bearing Status:**

- Begin Weight-Bearing as Tolerated (WBAT) progression between 6-8 weeks.
- Gradually transition from toe-touch weight-bearing (TTWB) to partial weight-bearing (PWB) (25% then 50%), and then progress to full WBAT under PT guidance.
- Discontinue crutches between weeks 7-8.
- Discontinue brace when crutches are discontinued.

## **Suggested Therapeutic Exercises:**

- Stationary Bike: Continue for 20 minutes, increase time after week 3 if tolerated.
- **Soft Tissue Mobilization:** 20-30 minutes per session, focusing on specific restrictions.
- Anterior Capsule Stretches: Surgical leg off table/figure 4.
- **Prone Hip ER/IR, Hamstring Curls:** Continue until 6 weeks post-op.
- Prone Hip Extension: 5x/week (weeks 3-5).
- Core and Shoulder Girdle Strengthening (Tall Kneeling/Half Kneeling): 5x/week (weeks 3-6).
- Standing Weight Shifts (Side to Side, Anterior to Posterior): 5x/week (week 6).
- Backward and Lateral Walking (No Resistance): 5x/week (weeks 6-8).
- Standing Double-Leg Knee Bends: 5x/week (weeks 8-10).
- **Double-Leg Squats:** 5x/week (weeks 8-10).
- Forward Step-Ups: 5x/week (weeks 8-10).
- Modified Planks/Side Planks: 5x/week (weeks 8-10).
- Elliptical: Start with 3 minutes at week 8, gradually increase as tolerated.

### **Joint Mobilizations:**

- Posterior/Inferior Glides: 2x/week (weeks 6-10).
- Anterior Glides: 2x/week (weeks 7-10).

#### 10-16 Weeks

#### Goal:

• Restore pre-injury functional level.

## PT Guidelines:

- Emphasize functional exercises in all planes.
- Progress exercises only with adequate control of prior movements.
- Rehabilitation duration may vary based on individual needs and goals.

# **Suggested Therapeutic Exercises:**

- **Soft Tissue and Joint Mobilizations:** As needed.
- Lunges (Forward, Lateral, Split Squats): 3x/week.
- Side Steps/Retro Walks with Resistance: 3x/week.
- Single-Leg Balance Activities (Balance, Squat, Trunk Rotation): 3x/week.
- Planks/Side Planks: Progress as tolerated.
- Single-Leg Bridges: Increase difficulty over time.
- Slide Board Exercises: 3x/week.
- Agility Drills (Pain-free): 3x/week.
- **Hip Rotational Activities (Pain-free):** 3x/week.

### 16-32+ Weeks

#### Goal:

• Return to sport.

### **PT Guidelines:**

- Full recovery typically takes 4-6 months, with maximal recovery occurring around 1 year.
- Complete a running analysis before starting running, cutting, or agility exercises.
- Assess functional strength and achieve proximal control before advancing to sportspecific training.

# **Suggested Therapeutic Exercises:**

- Running Progression: Begin on AlterG treadmill at week 16, progress as tolerated.
- Agility Exercises: Start at week 20.
- Multidirectional/Cutting Activities: Begin at week 24.

- Plyometrics: Begin at week 24.
- Sport-Specific Training: Begin at week 24.

**Note**: Progression through these phases should be based on individual recovery, with all exercises adjusted as necessary under the guidance of your surgeon and physical therapist. Regular follow-ups with the surgical team are crucial to ensure optimal recovery