

WESTERN ORTHOPAEDICS Excellence in Motion

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Hip Arthroscopy Rehabilitation Protocol

The intent of this protocol is to provide guidelines for progression of rehabilitation, it is not intended to serve as a substitute for clinical decision making. Progression through each phase of rehabilitation is based on clinical criteria and time frames as appropriate.

Phase 1- Protection Phase

Post Op Weeks 1-4
Post Op Weeks 1-9 With Microfracture Procedure

Weight Bearing:

- Foot Flat Weight Bearing for 4 weeks (20-30%)
- Ligamentum Teres Reconstruction will remain FFWB for 6 weeks
- Microfracture procedures will remain FFWB for 6-8 weeks

Initial ROM Related Restrictions for 2 weeks:

- External Rotation to 0^o
- Extension to 0^o
- Abduction to 45^o
- CPM 4-6 hours daily
- Spend 2 hours per day on stomach to allow for mild stretching of the hip flexors
- Avoid impinging with flexion and FADIR ROM exercises

Protection Phase Goals:

- Reduce swelling and pain
- Restore mobility within limitations
- Restore normal gait
- Promote normal proprioceptive and neuromuscular control

Pain and Swelling:

- PRICE Protection, Rest, Ice, Compression, Elevation
- At a minimum 5-6 times per day for 20-30-minute sessions
- there is no maximum!
- Icing is encouraged to be done in prone
- Ankle Pumps for swelling and DVT prevention

Range of Motion:

- Passive Range of Motion
- Partner assisted ROM recommended for 10 minutes, 2x/day
- Circumduction (hip circles)
- Internal rotation (log rolls)
- Active/Active Assistive Range of Motion
- Week 1 begin quadruped rocking and cat/camel
- Upright stationary bike without resistance 20 minutes per day
 - No recumbent biking to avoid hip flexor contractures
- Initiate Thomas stretch at week 3

Aquatic Therapy:

- Begin in **week 3** once stitches have been removed
- Circumduction, Hip abduction, 1/3 squats
- Forwards and Backwards gait with emphasis on full hip extension and an upright trunk

Strength/Motor Control:

- Isometrics
- Quad sets, Glut sets, Transverse Abdominis isometrics
- Edge of bed hip extension
- Standing Skaters (abduction with IR) for glut medius
- Tall kneeling with controlled rotation and pelvic tilt

Proprioception and Neuromuscular Re-education:

- Prone IR/ER rhythmic stabilization exercises
- Quadruped stabilization exercises
- ½ kneeling for stability prior to full weight bearing
- Standing forward flexion

Gait

- Crutches with FFWB are indicated for the first 4 weeks to keep excessive load off of the hip and protect healing structures. This will also help to reduce swelling and pain. Ligamentum teres reconstruction remains FFWB for 6 weeks. Microfracture procedures must remain FFWB for 6-8 weeks.
- Weaning from crutches
 - o Begin with tall kneeling and standing weight shifting exercises
 - \circ Begin introducing more weight on operative leg with crutches. Start with 50% for half a week
 - o Transition to FWB with 1-2 crutches for a week
 - o Transition off crutches with use in the afternoons if starting to fatigue
- Focus on gait exercises to promote normalized hip extension and lumbar stabilization

Phase 2- Initial Strengthening Phase

Post Op Weeks 6-12 Post Op Weeks 9-13 With Microfracture Procedure

Criteria for advancement to Phase 2:

- Pain-free PROM
- Able to maintain full bridge position without compensations
- Mild deviations in gait with no discomfort
- Maintain stable tall kneeling position without anterior hip discomfort Goals:
- Full passive ROM including pain-free hip flexion
- Rotary stability including side and front planks without compensations or pain
- Normalize gait
- Increase leg strength to allow for:
 - Walking 1 mile
 - Stair descending without compensations
 - o Single leg bridge
 - Double knee bends without compensations
 - o Single knee bend to 70^o without compensations

Strength, Proprioception and Neuromuscular Re-education:

- Closed chain single and double leg strength and stability exercises at therapist's discretion. Include multiplanar strength.
- Swiss ball flexion (hamstring ball rolls) for initial psoas activation

Cardio:

- Bike gradually increasing resistance at week 6 and when patient can ambulate without a limp; limit to a maximum of 30 minutes total for the first two weeks then continue to progress gradually if there is no increased hip pain
- Elliptical trainer beginning at week 8
- Swimming without leg kick (using a pool buoy) beginning at week 8. Swimming with kicking allowed at week 12 only if there is no hip flexor pain

Phase 3- Advanced Strengthening (Sport Specific Training) Post Op Weeks 12+

Criteria for Advancement to Phase 3:

- Full active and passive ROM
- Ascending and descending stairs with involved leg without pain or compensation
- Gait without deviations or pain after 1 mile of walking on level surface
- At least 1 minute of double knee bends without compensations
- Single knee bends to 70° flexion without compensations
- Rotary stability and ability to hold plank

Goals:

- Restore multi-directional strength and agility
- Restore ability to absorb impact on leg (plyometric strength)
- Full extension for normal running mechanics

Phase 4- Return to Sport

Criteria for advancement to phase 4:

- Bilateral 1-minute single leg stance with alternate hip flexion/extension
- Resisted single leg squat for 3 minutes

Goals:

 Perform sport specific strength training and drills until patient begins team training progression

Closed chain Pilates is recommended for hip maintenance and can be very helpful in the final phase of PT to address late muscular glut imbalance and maintain posterior chain strength

Reminder: there is a minimum 6-month recovery period until patients are cleared for all high impact exercise

^{**}No running or kicking activities until a minimum of 5 months and patient is able to demonstrate pain-free standing repetitive hip flexion**