

HIP ARTHROSCOPY REHABILITATION PROTOCOL

General Guidelines:

- Systematic approach to rehabilitation (generally under the guidance of a physical therapist with experience in hip rehab) is critical to ensuring optimal outcome
- Physical therapy should start within 1 to 3 days after surgery
- Progression through therapy phases is pain- and function-dependent, not time-dependent
- Pushing the rehabilitation too quickly may aggravate the hip and delay recovery
- Precautions:
 - Crutches and partial weight-bearing to protect repair for 4 to 8 weeks depending on procedure
 - **Avoid** excessive external rotation and flexion (stresses repair)
 - **Avoid** early active hip flexion that can lead to hip flexor tendonitis
 - **Avoid** advancing too rapidly through therapy protocol to prevent flare-ups
 - No driving until permission from surgeon (usually around 4 weeks)
 - Medications help reduce risk of abnormal bone formation (heterotopic ossification) and blood clot (DVT or deep venous thrombosis)
- Early post-operative goals include reducing post-operative pain, swelling and inflammation while avoiding stiffness and improving motion
- Late post-operative goals include restoring motion and strength, normalizing gait, and conditioning
- Ultimate goal is to return to prior or desired level of activity after eradicating the structural or mechanical problem responsible for symptoms

PHASE I (0-3 weeks)

Goals:

- Surgical recovery
- Protect repair
- Control inflammation/swelling and pain
- Crutch training to help offload hip while normalizing gait
- Encourage mobility
- Promote wound healing

Weight bearing:

- Protected weight-bearing (50% of body weight) x **4 weeks** postop
- Use two crutches to limit weight while using operative leg
- Maintain flat foot on ground (reduces forces in the hip joint)

Restrictions:

- Hip passive range of motion within post-op restrictions
 - No external rotation > neutral



- No hip flexion > 90 degrees
- Other precautions depend on the procedure performed

Therapeutic Exercises:

- Hip joint mobilization
- Manual therapy
- Scar massage
- Modalities to reduce swelling and inflammation
- Muscle activation
 - Hip isometrics (glut, quad, hamstring sets, abductor and adductor isometrics)
 - Heel slides (Active-assisted range of motion)
 - Pelvic tilts
 - Double legged supine bridge
 - Seated knee extension
 - Prone knee flexion
- Standing exercise (keep knee straight)
 - Abduction and adduction without resistance
 - Flexion and extension without resistance
 - Double heel rises
- Stationary bike with high seat (to prevent hip flexion >90 degrees) with **no** resistance

Criteria for advancement to Phase II:

- Minimal pain with phase I exercises
- Minimal limitations in range of motion (90 degrees of hip flexion with minimal pain)
- Normalized heel to toe gait with two crutches and partial weight bearing

PHASE II (4-6 WEEKS)

Goals:

- Protect repair
- Increased range of motion
- Transition from crutches
- Normalize gait
- Progressively increase muscle strength

Immobilization/Crutches:

- Transition from crutches at the 4-week mark
 - Start with single crutch on **opposite** side from surgery, unload the operative hip during gait
 - May transition to no crutches once comfortable and no significant gait deviations
 - May continue to require crutch use with planning to walk a distance or be on feet for longer period of time

Range of Motion:

- Progress with hip range of motion
 - No external rotation >20 degrees
 - No hip flexion >105 degrees
 - Prone hip rotations

Therapeutic Exercises:

- Manual therapy
 - Massage portal sites
 - Hip joint mobilizations
 - Deep tissue mobilization
 - Pelvic and lumbar spine joint mobilizations
 - Desensitize irritable nerve distributions
- Muscle activation
 - Progress core strengthening
 - Hip strengthening
 - Hip flexor activation (careful with active / resisted hip flexion to prevent inflammation)
 - Clam shells
 - Single-leg bridges
 - Leg presses (minimal resistance)
 - Weight-shifting
 - ¼ mini squats
 - Quadruped superman
 - Standing exercises
 - Abduction and adduction with low resistance
 - Flexion and extension with low resistance
- Standard stationary bike – increase duration and resistance as tolerated
- Pool therapy recommended after portals healed
 - Decrease depth with each successive week (start at chest deep and progress to waist deep)
 - 4-direction walking
 - Step-ups

Criteria for advancement to Phase III include:

- Minimal pain with phase II exercises
- 105 degrees of hip flexion, 20 degree of external rotation with minimal pain
- Pain free/normal gait pattern
- Hip flexion strength >60% of opposite side
- Hip abduction/adduction strength, internal/external rotation strength >70% opposite side

PHASE III (7-10 weeks)

Goals:

- Protect repair
- Normalize motion and strength
- Normalize gait
- Improve endurance and conditioning
- Improve neuromuscular control, balance, and proprioception

Range of Motion:

- Normalize hip range of motion
 - No restrictions
 - Symmetry with unaffected side

Therapeutic Exercises:

- Manual therapy
 - Massage portal sites
 - Hip joint mobilizations
 - Deep tissue mobilization
- Hip strengthening
 - Increase resistance with active exercises
 - Clamshells with theraband
 - Sidelying planks
 - Physioball hamstring
 - Side-stepping with resistance
 - Lunges
- Neuromuscular training
 - Core stabilization
 - Single leg balance
 - Side steps over cups
 - Step-ups with eccentric lowering
 - Bosu squats
- Standard stationary bike – continue to increase duration and resistance, lower seat to allow increasing hip flexion
- Elliptical machine with minimal resistance
- May use treadmill walking program
- Continue pool therapy, increase speed and duration, decrease depth

Criteria for advancement to Phase IV:

- Symmetrical range of motion
- Hip flexion strength >70% of contralateral side
- Hip abduction/adduction strength, internal/external rotation strength >80% opposite site
- Cardiovascular fitness returning to pre-operative level



PHASE IV (11-14 weeks)

Goals:

- Normalize function
 - Sports specific training
 - Prepare return to activity
- Continue phase III exercises with progressive increase in intensity
 - Manual therapy as indicated
 - Core strengthening
 - Advance proprioceptive training
 - Start introducing low-impact plyometrics
 - Increase resistance and duration on bike and elliptical
 - Pool running
 - Swimming as tolerated
 - Sport-specific agility drills

Final phase (14 weeks & beyond)

- Traditional weight-training
- Increased intensity of plyometrics
- Begin running progression
- Sport specific drills without pain
- Cardiovascular fitness at or better than pre-operative level

Return to sports/activities

- Full pain-free ROM symmetrical to opposite side
- Symmetric hip strength
- Stable pelvis
- Ability to perform sport-specific drills at full speed without pain