



Dr. Chad Zehms
Hip Arthroscopy

General Guidelines:

- Despite the minimally invasive nature of the hip arthroscopy, significant work was performed inside the hip joint. Time is required for the repaired structures to heal.
- Systematic approach to rehabilitation (generally under the guidance of a physical therapist) is critical to ensuring an optimal outcome.
- Each patient's recovery is highly individual, and use of the therapy protocol should be customized to the patient.
- Patient's will often receive an ice machine following this procedure; however, they will not be using a brace or continuous passive motion machine (CPM)

Rehabilitation:

- Patient should meet with the physical therapist prior to the surgery for a functional assessment and to review the protocol
- Formal physical therapy should start within 1 to 3 days after surgery
- Progression through therapy phases is based on healing times, pain, and function dependent and is not exclusively time dependent.
- Pushing the rehabilitation too quickly may aggravate the hip and delay recovery.

Precautions:

- Crutches and partial weight bearing to protect the repair are based on each specific procedure. Refer to specific instructions from Dr. Zehms regarding weight bearing restrictions.
- Avoid excessive external rotation and flexion which stresses the repair.
- Avoid early active hip flexion that can lead to hip flexor tendonitis.
- Avoid advancing too rapidly through the therapy protocol to prevent flare-ups.
- No driving until permission from the surgeon (usually around 4 weeks).
- Medications help reduce risk of abnormal bone formation (heterotopic ossification) and blood clot (deep venous thrombosis).



Phase 1 - Early Protective Phase (0-2 weeks)

Goals for Phase 1

- Recover from surgery
- Protect repair
- Reduce post-operative pain, swelling, and inflammation
- Crutch training to unload hip, while normalizing gait
- Prevent muscular inhibition
- Encourage mobility
- Promote wound healing
 - Sutures out in 10-14 days

Criteria for Progression to Phase 2

- Minimal pain with Phase 1 exercises
- Minimal limitations in range of motion
 - 90° of hip flexion with minimal pain
- Normalized heel to toe gait with two crutches and partial weight-bearing

Weight Bearing and Gait Training

- Foot flat weight bearing 20#
 - Use two crutches or two wheeled walker to limit weight, while stepping on the operative leg
 - Maintain foot flat on the ground (reduces force in the hip joint)

PROM

- Hip PROM within post-op restrictions
 - No hip flexion >90°
 - Other precautions depend on the procedure performed

AAROM

- Standard stationary bike
 - High seat to prevent hip flexion >90°
 - No resistance

AROM

- Standing exercises keeping knee straight
 - Hip abduction and adduction without resistance
 - Hip flexion and extension without resistance

Manual Therapy

- Grades I-II hip joint mobilizations as needed
- Grades I-II hip circumduction mobilization
- Scar mobilization as needed

Strengthening

- Hip isometrics – glutes, abductor and adductor
- Quads and hamstrings sets
- Active-assisted heel slides
- Pelvic tilts
- Double legged supine bridge
- Seated knee extension
- Prone knee flexion

Modalities

- Modalities to reduce swelling and inflammation



Phase 2 - Initial Strengthening (2-6 weeks)

Goals for Phase 2

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

Criteria for Progression to Phase 3

- Minimal pain with Phase 2 exercises
- 90° of hip flexion
- Pain free/normal gait pattern
- Hip flexion strength >60% of the opposite side
- Hip abduction/adduction strength and internal/external rotation strength >70% of the opposite side

Weight Bearing and Gait Training

- Transition to weight bearing as tolerated weaning from use of assistive device
 - Start with single crutch on the opposite side from the surgery to unload the operative hip during gait
 - May transition to no crutches, once comfortable and no significant gait deviations
 - May continue to need crutches, when planning to walk a distance or being on the feet for a longer time.

AROM

- Progress with hip range of motion as symptoms allow
- Continue to limit hip flexion to 90° for 6 weeks

Manual Therapy

- Continue Grades I-II hip joint mobilizations
- Avoid long axis distraction of the hip
- Hip circumduction mobilization Grades I-II
- Soft tissue massage at the portal sites
- Deep tissue mobilization as needed
- Pelvic and lumbar spine joint mobilizations as needed
- Desensitize irritable nerve distributions as needed

Strengthening

- Progress core strengthening
- Hip strengthening
 - Hip flexor activation - careful with active/resisted hip flexion to prevent inflammation
 - Clamshells
 - Single leg bridges
 - Leg press - minimal resistance
 - Weight-shifting
 - 1/4 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

Aquatics

- Pool therapy is recommended after the portals are healed

Modalities

- Utilize cryotherapy modalities as needed



Phase 3 - Strengthening (6-10 weeks)

Goals for Phase 3

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

Criteria for Progression to Phase 4

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

AROM

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

Manual Therapy

- Stiffness dominant hip joint mobilizations Grades III-IV as needed
- Soft tissue massage at the portal sites as needed
- Deep tissue mobilization as needed

Strengthening

- Increase resistance with active exercises
- Clamshells with Theraband
- Side lying planks
- Physioball hamstrings
- Side-stepping with resistance
- Lunges

Neuromuscular

- Core stabilization
- Single leg balance
- Side steps over cups
- Step ups with eccentric lowering
- BOSU squats

Aquatics

- Continue pool therapy - increase speed, duration, and decrease depth

Cardiovascular

- 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

Modalities

- Utilize cryotherapy modalities as needed



Phase 4 - Strength and Plyometric Phase (10-14 weeks)

Goals for Phase 4

- Normalize function
- Prepare return to activity
- Sports specific training

Manual Therapy

- As indicated

Strengthening

- Continue Phase 3 exercises with progressive increase in intensity or resistance. Examples:
 - Step-ups/downs
 - Progress to multi-directional stepping patterns
 - Progress stable to unstable surfaces
 - Lunges
 - Progress to multi-directional lunging patterns
 - Progress stable to unstable surfaces
 - SL squats
 - SL RDL's
 - Band walking
 - Progression of glute bridging
 - Continue with progressive increasing of resistance
 - Continue with core strengthening exercises with progressive increase in intensity

Proprioception

- Advance proprioceptive training

Agility

- Sport specific agility drills

Advanced Gait Re-training

- Initiate return-to-running progression
 - Utilize AlterG treadmill or underwater treadmill if available

Plyometrics

- Start introducing low impact plyometrics

Cardiovascular

- Increase resistance and duration on bike and elliptical

Aquatics

- Pool running
- Swimming as tolerated



Phase 5 - Return to Function Phase (4-6 months)

Goals for Phase 5

- Minimize pain and inflammation
- Maintain full hip PROM and AROM
- Restore muscle strength and endurance
- Restore neuromuscular control
- Safe and effective return to previous level of function for sport or activity

Criteria for Return-to-Sport and Activity

- Full, pain free hip PROM and AROM
- Hip strength $\geq 90\%$ of the uninvolved side
- Lower extremity strength, power, and endurance $\geq 90\%$ of the uninvolved side
- Full speed sport-specific drills without pain or compensation
- Successful completion of return-to-sport testing
- Lower Extremity Functional Scale score $\geq 70/80$

Stretching

- Continue stretching of all hip musculature

Manual Therapy

- Continue stiffness dominant hip joint mobilization Grades III-IV as needed
- Continue other hip and lumbosacral manual therapy techniques as needed

Strengthening

- Continue advancement of previous strengthening exercises

Neuromuscular Control

- Continue to incorporate unstable surfaces and dynamic movement patterns with functional strengthening progression

Core Stabilization

- Continue to incorporate core integrated exercises with functional strengthening progression

Advanced Gait Re-training

- Progress return-to-running program
- Advanced agility and plyometric drills

Sport-Specific Training

- Initiate sport-specific training programs
 - Interval sport programs for running, cycling, swimming, skating, throwing, golfing, etc.
 - Traditional weightlifting exercises

Activity-Specific Training

- Prepare body for activity or job specific duties

Modalities

- Utilize cryotherapy, thermotherapy, and electrical modalities as needed

HEP

- Establish HEP for long-term self-management

This protocol was reviewed and updated by Chad Zehms, MD and Katelyn Peterson, PT, DPT on November 10, 2025