Combined Hip Arthroscopy and Proximal Hamstring Repair Protocol

Please read entire protocol prior to initiating therapy

- Please do not hesitate to contact Dr. Wolff with questions or concerns.
- Rest is a vital component of recovery from hip arthroscopy. Less is more.
- Manual therapy (including modalities, dry needling, ART, etc.) is an important part of recovery. The initial weeks of therapy should focus on manual treatment and gait/crutch training.
- Utilize the exercise descriptions as a guide. They are not intended to serve as a substitute for clinical decision—make adjustments within given guidelines and precautions as needed.
- Patients’ progression will vary widely. It is rare to have a patient progress through this rehab protocol without setbacks.
- Do not feel obligated to do every exercise in the protocol.
- Good recovery depends on the therapist and patient monitoring the effects of each particular exercise. If it hurts, don’t do it! – regardless of the time from surgery.
- LESS PAIN=MORE GAIN!
- If you have access to a pool, please request aquatic exercises found on Dr. Wolff’s website.
PHASE 1: Weeks 1-6

Goals:
- Diminish pain/swelling and inflammation
- Establish proper gait with crutches
- **Protect integrity of hamstring repair**
  - *Sitting is ok, however generally patients will be most comfortable in a reclined position with legs propped up

Precautions:
- **Do not push through pain**
- ROM restrictions, unless otherwise noted:
  - **No hip flexion beyond 90 degrees, but should be kept in a tolerable range**
  - No active knee flexion against gravity
- Weight bearing restrictions: **30-50% weight bearing for 4 weeks then wean to 100% by week 6.** Foot flat at all times. **Bilateral crutch use for 6 weeks minimum.** May need to transition to 1 crutch for an additional 1-2 weeks.
- **NO HAMSTRING STRETCHING**
- **BRACING:** Patient **may or may not** be required to wear a hip brace. They will be provided with one at the time of surgery if needed and it will be locked at 30 degrees of hip flexion. This brace ONLY needs to be worn when ambulating for the first 6 weeks, and is ok to forego when just getting around the house.

**Diminish pain and inflammation:**

**PRICE - Protection, Rest, Ice, Compression, Elevation**
- Use these items together to reduce pain and swelling
- Modalities as indicated - Ultrasound and Electric Stimulation

**Strategies to reduce pain during ADLs:**
Hook foot of non-surgical leg under ankle of surgical leg to assist with supine sit transfers
Exercises:

![Ankle Pumps](image)

Ankle Pumps: Do throughout the day

![Transverse Abdominus (TA) Contraction](image)

Transverse Abdominus (TA) Contraction

Isometrics:

1. Gluteal Sets: 5 second holds, 20 repetitions
2. Quad Sets: 5 second holds, 20 repetitions
3. Hamstring Isometrics beginning after 2 weeks if tolerated**

Soft Tissue Massage

Once a day: mobilize and gently flush out edema
Passive Range of Motion (PROM)

- Performed by therapist and caretaker
- Follow ROM precautions: **No hip flexion beyond 90 degrees for 6 weeks**
- Stay in PAIN-FREE range only. Do not force motions.
- Patient should remain completely passive. **Assisting with motion will cause soreness.**
- Perform once a day for 8 weeks

Flexion - 20 repetitions. Gentle stretch only, do NOT force motion. **Do not go beyond 90 degrees in first 6 weeks.**

Circumduction in flexion - 3 x 20 repetitions (both clockwise and counterclockwise). Have partner flex hip, staying in pain-free range, and move in a circular motion. Start with small circles. Gradually increase range as you are able to tolerate. Do not force motion. Do not exceed 90 degrees.

Abduction - 20 repetitions. Gentle stretch only. Do not force motion.
Circumduction in Neutral – 3x20 repetitions (clockwise and counterclockwise). Have partner move leg in circular motion with knee straight. Start with small circles and gradually increase as tolerated. Stay in pain-free range, do not force motion.

Supine Hip Roll (Internal Rotation) Have partner gently rotate leg inward. For some patients this is more comfortable with the hip slightly

Stretching

Prone Lying – at least 15 minutes per day, on hands only if comfortable without back pain

Crutch Weaning Exercises beginning at week 4:
- Focus on avoiding/eliminating Trendelenburg/compensated Trendelenburg.
- Increase weight-bearing by 25% every 1-3 days until you reach 100%.
- Continue using both crutches during this period until 6 weeks.

1. Weight Shifting
2. Single Leg Balance
3. Side-stepping with NO resistance
PHASE 2: Weeks 7-12

Goals:
- Continue to reduce pain and inflammation
- Protect integrity of repaired tissue
- Continue to normalize ROM
- Prevent muscular inhibition
- Restore normal gait
- **Initiate GENTLE hamstring stretching and strengthening as tolerated.**

Precautions:
- No ROM restrictions at this point but continue to keep motion in a range that does NOT increase pain. **NO isolated hip flexor strengthening/supine SLR.**

Exercises:
Continue all exercises from Phase 1

Add the following:

Bent Knee Fall Outs

Double Leg Bridging
Soft Tissue Massage
- Continue as in Phase 1
- Once incisions have healed completely, more aggressive scar massage can be completed using Vitamin E oil (or lotion of choice)

Stationary Biking
- Start with 10 minutes. May add resistance as tolerated at week 8. Start slowly. Do not increase time and resistance on the same day.
Passive Range of Motion

- Continue as in Phase 1

Stretching

- Continue exercises from Phase 1

- May initiate gentle passive hamstring stretching at week 6. Do not force or go beyond point of increased discomfort.

Add the following:

Gentle Hip Flexor Stretch

Gentle Adductor Stretch
Piriformis Stretch

Gentle IT Band Stretch

FABER Stretch – **DO NOT** force movement. Patient should be supported on pillows to increase comfort.

Modified Cobra
PHASE 3: Weeks 13-17

Goals:

- Full active and passive range of motion
- Hamstring strengthening
- Normalize gait
- Stationary bike with resistance. Work up to 30-45 minutes.
- May begin elliptical trainer (low resistance, pain-free) if tolerating bike with resistance.
- Increase leg strength to allow for:
  - Walking >1 mile
  - Ascending and descending stairs
  - Double knee bends without compensations
  - Single knee bend to 70 degrees of flexion without compensations
  - Resisted side-stepping without pain

Precautions:

- **DO NOT BEGIN ALL EXERCISES AT ONCE! ADD NUMBER OF EXERCISES IN A GRADUAL FASHION.**
- Proceed with caution with strengthening and continue to be mindful of hamstring discomfort. Do not add several new exercises at once.
- Do not push through hip pain or pinching. Watch for hip pain during or after new exercises.
- No weight-bearing restriction.
- Add glute strengthening exercises first, then slowly add hip flexor exercises.
- Joint mobilizations may be used as indicated. **DO NOT OVERSTRETCH.**
- Proceed carefully with active hip flexor exercises as they may cause hip flexor tendonitis. **No active hip flexor strengthening until 12 weeks post-op.**
Exercises:

Prone Hip Rotator Activation: 1 set, 20-30 repetitions, once per day. Same as in Phase 2, but partner can gradually add resistance to this motion as tolerated, and you can go beyond neutral if tolerable.

Prone Hamstring Activation: 1 set, 20-30 repetitions, once per day. Gentle resistance can be added if tolerated this well after a few weeks. Try to avoid hips from flexing and use your transverse abdominis.

Bent Knee Fall Outs with band
Glut Max Progression:

Hip Extension in Quadruped

Prone on end of table – Hip Extension with External Rotation

Quadruped – Opposite arm and leg extended. Raise and tap.

Standing Hip Extension with External Rotation – use band when appropriate
Bridging Progression:

Double Leg Bridges

Bridges with kick-outs

Single leg bridging to fatigue

Prone Planks:

Forearms and Knees

Forearms and Toes

With Alternating Hip Extension
Prone plank with alternating lateral stepping

Side Planks: (For advanced, do any combination of the following with forearm on Bosu)
Lunging Progression:

Lunge

Side Lunge

Transverse Lunge
Hip Flexor Progression:

Prone Isometrics into pillow

Heel Slides with strap

Heel Slides without strap
Sidelying Glut Med Progression:

Assisted Side Leg Raises (eccentric component only)

Side Leg Raises with Step Stool or Pillows (partial motion)

Side Leg Raises

Clams – Level 1
Clams – Level 2

Clams – Level 3

Side Leg Raise with Circles – progress from small to large circles

Hip Hike Progression: (for advanced, do any of the following while standing on foam)

Hip Hike on box. Use stick for balance if needed, progress to no upper extremity support.
Hip hike hold, flexion and extension in pendulum motion with opposite leg while maintaining hip hike.

Hip hike hold, abduction with opposite leg while maintaining hip hike.

Double Knee Bends (for advanced, use balance board)
Single Knee Bends:

Single Knee Bends with 3-way cone reach
Lawn Mower pulls with weight stack

Eccentric quad strengthening- ball toss, lowering self to chair

**Side Stepping:**

Side-stepping without resistance
Side-stepping with resistance (pulling weight stack preferred, but can use band)

**Balance Progression:**

Single Leg Balance on Flat Surface

Clock exercise on flat surface
Single Leg Balance on Balance Boards

Single Leg Balance on balance board with ball tosses

Clock Exercise on Balance Board

Stretching:
- Continue All Stretches, Add:

Army Crawler (Flexion, Abduction, ER in prone) – 5 minutes per day
PHASE 4: Weeks 18+

Please note: Persons who do not participate in higher level activities may not need to advance to Phase 4. Activities that require advanced strengthening include: running, bounding sports, cutting and jumping sports, lacrosse, football, soccer, dance, hockey, golf, basketball, skiing and snowboarding, tennis and racquet sports.

Return to Running: Must be cleared by Dr. Wolff prior to initiating. Protocol may be found on www.andrewwolffmd.com under the “Physical Therapy” tab

Exercise Suggestions:

Dynamic Stretching Sequence:

Toe Swipes

Walking Lunges
Other Exercise Suggestions:

- Walking Lunges with backward lean
- Over-under hurdles
- Toy Soldiers
- Single Leg Closed Chain Progression
- Lateral Agility with cord
- Diagonal side-to-side with cord
- Forward box lunges with cord
- Speed Ladder and other agility drills