



Hip Arthroscopy Labral Repair Rehabilitation Protocol

Jason S. Holm, MD

jholm@tcomn.com

(952) 808 3000

PHASE 1: INITIAL

- Diminish pain and inflammation
- Protect integrity of repaired tissue
- Prevent muscular inhibition
- Restore ROM within the restrictions

WEEK 1 (2 Treatments)

EXERCISES:

- 1) Upright Stationary Bike—no to minimal resistance with max time 20 minutes twice daily
- 2) Ankle Pumps (10x every hour)
- 3) Lay on Stomach (minimum of 20 min. 3x/day)
- 4) Quad Sets (hold 10 sec.) 10x
- 5) Gluteal Sets (hold 10 sec.) 10x
- 6) Transverse Abdominus Isometrics (hold 10 sec.) 10x
 - Place your first 2 fingers just inside your pelvic bone
 - Take a deep breath in and out, relaxing your abdominal muscles
 - At the end of your exhale, draw in your belly button toward your spine (simulate a kegel exercise)
 - You should feel tension under your fingers without bulging and there should be no movement of the spine or pelvis (hold the contraction through 10 normal breaths)
- 7) Pelvic Tilts (hold 10 sec.) 10x
- 8) Cat and Camel 2x10
- 9) Step Ups with Uninvolved Leg First using Bilateral Crutches 2x10
- 10) Isometric Hip Abduction and Adduction (hold 10 sec.) 10x
- 11) Active Internal Rotation (don't push into a pinching sensation)
 - Bring your hip to 70° and slowly rotate foot out 2x10
- 12) Piriformis Stretch with hip flexion @ 70° in sidelying (hold 30 sec.) 3x
- 13) Uninvolved Knee to Chest
 - Lie on your back and lift non-surgical knee to chest (hold 30 sec.) 3x
- 14) Quad Stretch
 - Lie on your stomach and bring ankle towards buttocks (hold 30 sec.) 3x

MANUAL THERAPY:

- 1) Passive Supine Hip Roll
- 2) Circumduction @ 45° of Hip Flexion in a clockwise and counterclockwise direction
- 3) STM focusing on quads, TFL, ITB, glutes, adductors, and low back
- 4) Passive Hip Abduction/Adduction
- 5) Game Ready Vasopneumatic Icing

GOALS:

- 1) Maintain ROM Restrictions
 - Hip Flexion 90° x 10 days, 120° x 3 weeks
 - Hip Extension 0° x 3 weeks
 - Hip External Rotation 0° x 3 weeks
 - Hip Abduction 25° x 2 weeks, 45° x 3 weeks
 - No Hip Internal Rotation and Adduction limits
- 2) Maintain Weight Bearing Restrictions using Bilateral Crutches
 - Partial Weight Bearing (<20 lbs.) x 3 weeks
- 3) Do not push through pain
- 4) Avoid Sitting @90° of Hip Flexion x 2 weeks

In the following weeks, the exercises that are written can be added to the prior weeks exercises.

WEEK 2 (2 Treatments)

EXERCISES:

- 1) Heel Slides 2x10
- 2) Short Arc Quads 2x15
- 3) Quadraped Rocking 2x10
- 4) Small Arc Bridges 2x10
 - Only lift buttocks off of surface and squeeze glutes
- 5) Active Reverse Butterflies 10x
 - Lie on your back with knees bent and feet flat shoulder width apart
 - Bring knees towards each other leaving feet in place
 - Squeeze knees (hold 5 sec.)
- 1) Supine Hip Abduction to 25° and Adduction 2x10
 - Push into heel with sliding leg in and out to avoid using hip flexors
- 2) Piriformis Stretch supine with hip flexion @ 70° (hold 30 sec.) 3x
 - Use pillows between legs for support

MANUAL THERAPY:

- 1) Passive Supine Hip Roll
- 2) Circumduction @ 45° of Hip Flexion in a clockwise and counterclockwise direction
- 3) STM focusing on quads, TFL, ITB, glutes, adductors, and low back
- 4) Passive Hip Abduction/Adduction
- 5) Game Ready Vasopneumatic Icing

GOALS:

- 1) Maintain ROM Restrictions
 - Hip Flexion 90° x 10 days, 120° x 3 weeks
 - Hip Extension 0° x 3 weeks
 - Hip External Rotation 0° x 3 weeks
 - Hip Abduction to 25°
 - No Hip Internal Rotation and Adduction limits
- 2) Maintain Weight Bearing Restrictions using Bilateral Crutches
 - Partial Weight Bearing (<20 lbs.) x 3 weeks (6 weeks if microfracture)
- 3) Do not push through pain
- 4) Avoid Sitting @90° of Hip Flexion

WEEK 3 (2 Treatments)

EXERCISES:

- 1) Standing Hip Abduction with Internal Rotation 2x20
- 2) Bridges with theraband around thighs 2x20
- 3) Long Arc Quads with 5 sec. holds 2x20
- 4) Active Hip IR with hip flexion @ 90° 2x15
- 5) Piriformis Stretch in sidelying with hip flexion @ 90° (hold 30 sec.) 3x
- 6) Hamstring Stretch
 - In a long sit position with your feet straight out in front of you, reach toward your feet (hold 30 sec.) 3x
- 7) Aquatic Therapy (once sutures are closed) beginning with water walking and progressing to water jogging with flotation device

MANUAL THERAPY:

- 1) STM focusing on quads, TFL, ITB, glutes, adductors, and low back
- 2) Passive Hip Abduction/Adduction, Internal Rotation
- 3) Gentle Joint Mobs for pain relief and mobility if needed
- 4) Game Ready Vasopneumatic Icing

GOALS:

- 1) Maintain ROM Restrictions
 - Hip Flexion 120° by 3 weeks
 - Hip Extension 0° x 3 weeks
 - Hip External Rotation 0° x 3 weeks
 - Hip Abduction to 45°
 - No Hip Internal Rotation and Adduction limits
- 2) Maintain Weight Bearing Restrictions using Bilateral Crutches
 - Partial Weight Bearing (<20 lbs.) x 3 weeks (6 weeks if microfracture)
- 3) Do not push through pain

PHASE 2: INTERMEDIATE

- Protect integrity of repaired tissue
- Restore full hip ROM
- Restore normal gait pattern
- Progressively increase muscle strength
- Improve neuromuscular control, balance, and proprioception
- Initiate functional exercises maintaining core and pelvic stability

Precautions during this phase:

- Avoid hip flexor, adductor, and piriformis irritation
- Avoid joint irritation which could occur by too much force, volume, & not enough rest
- Avoid ballistic or aggressive stretching
- No treadmill use

WEEK 4 (2 Treatments)

EXERCISES:

- 1) Standing Hip Abduction with ER and IR bringing leg in a 45° angle back 2x20 each
- 2) Standing Hip Adduction 2x20
- 3) Standing Hip Extension (when anterior hip capsule is closed) 2x20
- 4) Supine Active Groin Stretch (hold 30 sec.) 3x
- 5) Standing Hip Flexion (small arcs) 2x20
 - Start with heel behind back and slowly bring heel in front as tolerated
- 6) Prone quad stretch with towel (hold 30 sec.) 3x
- 7) Involved Knee to Chest Stretch (hold 30 sec.) 3x
 - Hold under the knee with both hands and lift up and in to chest in a scooping motion
- 8) Figure 4 stretch (hold 30 sec.) 3x
- 9) Hip ER and IR active ROM in sit
- 10) Shuttle squats with minimal weight and only 25% weight bearing through affected leg 2x20
- 11) Partial and Oblique Sit-ups 2x15 each

MANUAL THERAPY:

- 1) STM focusing on quads, TFL, ITB, glutes, adductors, and low back
- 2) Passive ROM for all hip motions into painfree ranges
- 3) Manual Traction/Joint Mobs for pain relief and mobility if needed
- 4) Game Ready Vasopneumatic Icing

GOALS:

- 1) Restore Full Hip PROM for all motions with mild stiffness into ER
- 2) Maintain Weight Bearing Restrictions using Bilateral Crutches
 - Partial Weight Bearing (25%) (Delay by 2 weeks if microfracture)
- 3) Do not push through pain

WEEK 5 (2 Treatments)

EXERCISES:

- 1) Upright stationary bike with resistance (30-45 min.)
- 2) Sidelying Clams (with 2 pillows between legs and contraction felt in buttock region) 2x20
- 3) Partial Squats (0°-30° of knee flexion) with TRX bands 2x20
- 4) Hip Abduction followed by Hip External Rotation in sidelying 2x20
- 5) Weight Shifts side to side and front to back 2x10 with 30 sec. holds
- 6) Shuttle squats and Heel Raises Bilaterally with minimal weight 2x20 each
- 7) Hip Abduction and Extension Exercises with Multi Hip Machine with light weight 2x20
- 8) Standing Hip Flexion to 90° 2x20
- 9) Stool Rotations into Hip IR and ER 2x20
 - Rotate the leg that is resting on the stool outward without moving your trunk and theraband attached to the ankle
- 10) Prone Hip Extension with Knee Bent and Straight 2x20 each
- 11) Wall Sits with Theraband around thighs (hold 60 sec.) 3x
- 12) Bridges with Alternate Leg Extensions 2x20



MANUAL THERAPY:

- 1) STM focusing on quads, TFL, ITB, glutes, adductors, and low back
- 2) Passive ROM for all hip motions into painfree ranges
- 3) Manual Traction/Joint Mobs for pain relief and mobility if needed
- 4) Game Ready Vasopneumatic Icing

GOALS:

- 1) Restore Full Hip PROM for all motions with mild stiffness into ER
- 2) Maintain Weight Bearing Restrictions using Bilateral Crutches and progressing to One Crutch if soreness does not increase. (If soreness increases, return to previous level for 1-2 days)
 - o Partial Weight Bearing (50-75%) (delay by 2 weeks if microfracture)
- 3) Do not push through pain

WEEK 6 (2 Treatments)

EXERCISES:

- 1) Elliptical Machine (15 min.)
- 2) Faber Slides 2x10
 - o Slowly slide heel up along opposite leg while allowing knee to fall outward
- 3) Standing Quad Stretch (hold 30 sec.) 3x
- 4) Standing Iliotibial Band Stretch (hold 30 sec.) 3x
- 5) Standing Hamstring Stretch (hold 30 sec.) 3x
 - o With your knees straight, reach toward the floor
- 6) Single Leg Stance on Even Surface (hold 30 sec.) 3x
- 7) Active Circumduction in Faber Position (2 minutes in each direction)
 - o Perform small rotational movements in clockwise and counterclockwise directions with affected leg's foot on opposite inner thigh
- 8) Squats with TRX Bands 2x20
- 9) Standing Hip Flexion to 120°
- 10) Prone Bilateral Hamstring/Adductor Curls with 8# dumbbell 2x20
- 11) Single Leg Dead Lift 2x10
 - o Standing on affected leg with leg forward, bend forward and reach for the ground
 - o Keep hips level and do not let hips rotate
- 12) Sitting Groin Stretch (hold 30 sec.) 3x
- 13) Step Ups and Step Downs (start with 2 inch step) 2x20
- 14) Lateral Step Ups and Downs (start with 2 inch step) 2x20
- 15) Single Leg Bridges 2x20
- 16) Standing Single Leg Heel Raises 2x20
- 17) TKE's with blue sports cord 2x20
- 18) Quadrapped Alternate Arm and Leg on swiss ball 2x20
- 19) Planks on Knees (hold 30 sec.) 3x
- 20) Stool Rotations with Theraband (start with red) 2x20

MANUAL THERAPY:

- 1) STM focusing on quads, TFL, ITB, glutes, adductors, and low back
- 2) Passive ROM for all hip motions into painfree ranges
- 3) Manual Traction/Joint Mobs for pain relief and mobility if needed
- 4) Game Ready Vasopneumatic Icing

GOALS:

- 1) Restore Full Hip PROM for all motions
- 2) Progress Weight Bearing from one crutch to no assistive device if soreness does not increase (If soreness increases, return to previous level for 1-2 days)
 - Full Weight Bearing (100%) (delay by 2 weeks if microfracture)
- 3) Do not push through pain

WEEK 7 (2 Treatments)

EXERCISES:

- 1) Elliptical Machine (30 min.)
- 2) Kneeling Hip Flexor Stretch (hold 30 sec.) 3x
- 3) Single Leg Stance on Uneven Surface (hold 30 sec.) 3x
- 4) Forward and Lateral Lunges 2x20
- 5) Hip Hikes 2x20
- 6) Foam roll oscillations over ITBand and Quads (5 minutes)
- 7) Single Leg Squats with minimal weight on Shuttle 2x20
- 8) Quadraped Alternate Arm and Leg 2x20
- 9) TKE's with black sports cord 2x20
- 10) Plank Pikes with knees on ball 2x20

MANUAL THERAPY:

- 1) STM focusing on quads, TFL, ITB, glutes, adductors, and low back
- 2) Manual Traction/Joint Mobs for mobility if needed
- 3) Game Ready Vasopneumatic Icing

GOALS:

- 1) Restore Full Hip AROM for all motions
- 2) Protect integrity of repaired tissue
- 3) Normalize gait pattern
 - Full Weight Bearing (100%) (at 8-9 weeks if microfracture)
- 4) Do not push through pain

PHASE 3: ADVANCED

During this phase:

- Restoration of muscular endurance and strength
- Restoration of cardiovascular endurance
- Optimize neuromuscular control

Precautions during this phase:

- Avoid hip flexor, adductor, and piriformis irritation
- Avoid joint irritation which could occur by too much force, volume, & not enough rest
- Avoid ballistic or aggressive stretching
- No treadmill use

WEEK 8 (2 Treatments)

EXERCISES:

- 1) Elliptical Machine (30-45 min.)
- 2) Wii Balance Activities
- 3) Booty Rippers 2x20
- 4) High Knee Steps 2x20
- 5) Reverse Lunges 2x20
- 6) Monster Walks Both Directions 2x20
- 7) Single Leg Balance on Bosu with eyes closed
- 8) Star Grid (5 sets x 3)
 - o Standing on affected leg, tap with your unaffected foot in a 12, 10/11, 9, 8/7, and 6 o'clock positions with your left foot and in a 12, 1/2, 3, 4/5, 6 o'clock positions with your right foot
- 9) Hip Flexion on Multi Hip Machine with light weight and small arc 2x20
- 10) Plank Pikes with feet on ball 2x20

MANUAL THERAPY:

- 1) STM focusing on quads, TFL, ITB, glutes, adductors, and low back
- 2) Manual Traction/Joint Mobs for mobility if needed
- 3) Game Ready Vasopneumatic Icing

GOALS:

- 1) Restore Full Hip AROM for all motions
- 2) Improve neuromuscular control, balance, and proprioception
- 3) Initiate functional exercises maintaining core and pelvic stability
- 4) Restore muscular strength and endurance

PHASE IV: SPORTS SPECIFIC TRAINING

(Pass Sports Test Prior to Phase IV)**

During this phase:

- Restoration of muscular endurance and strength
- Restoration of cardiovascular endurance
- Optimize neuromuscular control, balance, and proprioception

WEEKS 9-12 (4 TREATMENTS)

EXERCISES:

- 1) Karaoke 2x20
- 2) Single Leg Squat on TRX bands 2x20
- 3) Bridge on TRX bands 2x20
- 4) Mountain Climbers 2x20
- 5) Single Leg Balance on Bosu Ball with Medicine Ball Trunk Rotations 2x20
- 6) Multiplane Lunges 2x20
- 7) Shuttle Runs 2x20
- 8) 60° Knee Bends with sports cord 2x20
- 9) Planks (hold 30 sec.) 3x



WEEKS 13-16 (4 TREATMENTS)

EXERCISES:

- 1) Jump Rope (5-10 Minutes)
- 2) Cutting @ 45° (5 Minutes)
- 3) Zig Zags (5 Minutes)
- 4) Jogging (10-20 Minutes)
- 5) Mountain Climbers on TRX bands 2x20
- 6) Box Jumping Forward and Back 2x20
- 7) Box Jumping Laterally 2x20
- 8) High Knee Lunges with Speed 2x20
- 9) Multiplane Lunges with Trunk Rotation 2x20
- 10) Planks on TRX bands (hold 30 sec. 5x)

GOALS:

- 1) Hip flexion strength > 85% of the uninvolved side
- 2) Full Pain-free Hip ROM
- 3) Ability to perform sports specific drills at full speed
- 4) Return to competition