

HIP ARTHROSCOPY:
Labral Reconstruction

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Total Hip Replacement 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. These guidelines should be administered under the supervision of a physical therapist.

Phase 0 – Pre-habilitation Phase Before Surgery Preparation

Goals:

- Prepare patient for surgery
- Achieve optimal ROM for easier recovery
- Achieve optimal conditioning for improved healing potential

Interventions:

- Patient education on post-operative protocol, ADL, hip precautions and ambulation with walker or crutches
- ROM, stretching and manual therapy to address ROM limitations
- General conditioning (i.e. stationary bike) and light strengthening regimen

Phase 1- Protection Phase Post Op Day 1-Discharge

Goals:

- Thorough assessment of living situation, availability of caregiver, need for home care and functional and cognitive status (completed by inpatient PT and OT)
- Patient and caregiver understanding of post-operative parameters, hip precautions, weight bearing precautions and post-operative protocol
- Achieve independent ambulation with assistive device
- Independent transfers (bed to stand, bathroom)
- Independent with ADL with assistance of caregiver or assistive devices (hip kit)
- Assist in reducing pain to tolerable levels
- DVT prevention and monitoring

Posterior Hip Precautions:

Follow these precautions for the first 6 weeks to limit chance of dislocation

- Avoid adduction
 - Crossing your surgical leg over midline (no crossing your legs)
 - keep pink wedge pillow between legs when asleep
- No bending past 90 degrees at your waist
 - Don't reach to put on your shoes and socks, have someone assist you
- No internal rotation
 - Make sure your surgical foot does not turn in towards the other foot.

Pain and Swelling:

- PRICE – Protection, Rest, Ice, Compression, Elevation
- Use these items together to reduce pain and swelling
- At minimum, 5-6 times per day for 20-30-minute sessions
- There is no maximum!
- Ankle Pumps, quad sets, glute sets, regular ambulation – for swelling and DVT prevention

Range of Motion:

- Passive Range of Motion
- Partner assisted ROM to be taught to patient and caregiver
- Self ROM exercises with strap (PROM and AAROM)
- Knee PROM and AROM
- Active Assist Rang of Motion
- Stationary Bike without resistance
- Manual therapy as indicated

Gait (walking) and ADL:

- WBAT unless otherwise noted
- Activities of Daily Living
 - Supine to sit and sit to stand transfers to be instructed while maintaining hip precautions
 - Positioning to maintain hip precautions
 - Instruct toilet, car, bath and shower transfers and address living situation needs for functional mobility at home
 - Instruction of use of assistive devices necessary for discharge to home (ex: hip kit)

Strength:

- Isometric Abduction
- Hip Flexion (up to 90 degrees)
- Quadriceps
- Hamstrings
- Calf Muscles

Proprioception and Neuromuscular Re-education:

- Begin open chain proprioception exercises
- Light co-contraction exercises
- Light closed chain stability balance exercises (if weight bearing status permits)

Phase 2- Outpatient Protection Phase

Hospital Discharge to Post Op Week 7

Criteria to Advancement to Phase 2 :

- Independent ambulation with assistive device to distance required for discharge to home
- Independent with hip precautions
- Independent with post-operative protocol and hip kit supplied
- Caregiver and/or patient independence with ADL and transfers while maintaining hip precautions
- Needs for functional mobility in living situation met
- Other goals established by therapists met
- Single knee bends to 70° flexion without compensations
- Rotary stability and ability to hold plank

Goals:

- Reduce swelling and pain
- Restore mobility within set limitations
- Promote return of strength in lower extremity musculature while maintaining hip precautions
- Hip flexors, abductors, adductors, extensors
- Knee extensors and flexors
- Continue DVT prevention and monitoring
- Restore normal gait within limits set by surgeon
- Promote normal proprioceptive and neuromuscular control

Pain and Swelling:

- PRICE – Protection, Rest, Ice, Compression, Elevation
- Use these items together to reduce pain and swelling
- At minimum, 5-6 times per day for 20-30-minute sessions
- There is no maximum!
- Ankle Pumps, quad sets, glute sets, regular ambulation – for swelling and DVT prevention

Range of Motion:

- Passive Range of Motion
- Partner assisted ROM to be taught to patient and caregiver
- Self ROM exercises with strap (PROM and AAROM)
- Knee PROM and AROM
- Active Assist Rang of Motion
- Stationary Bike without resistance
- Advance to active ROM while maintaining hip precautions
- Manual therapy as indicated
- Hydrotherapy once incision is fully healed with no scabbing (usually about 3-4 weeks)

Gait (walking) and Activities of Daily Living:

- Continue to maintain weight bearing precautions. Ambulation distances may be increased for cardio-vascular benefit. If WBAT, weaning from assistive device progression may begin as tolerated.
- Weaning from crutches or walker
 - Begin with weight shifting exercises
 - Begin walking with more weight on leg using crutches
 - Single crutch or cane walking
 - This will reduce weight on your surgical leg by 25%
 - Be sure to place the crutch under the *opposite* arm
 - Walk small distances in home without crutches and take crutches with you for longer distances
- Hydrotherapy
 - May begin when incisions are healed without scabbing about 3-4 weeks
 - Walk in water at shoulder level
 - Advance to walking at waist level

Strength:

- Isometric with progression to standing, open-chain exercises
- Abduction
- Flexion (up to 90 degrees until after 6 weeks)
- Quadriceps
- Hamstrings
- Calf Muscles

Proprioception and Neuromuscular Re-education:

- Begin open chain proprioception exercises
- Light co-contraction exercises
- Light closed chain stability balance exercises (if weight bearing status permits)

Phase 3- Initial Strengthening

Post Op Week 7-15

Criteria for advancement to phase 3:

- PROM and AROM within precaution limitations
- Minimal pain
- -4/5 strength assessed in hip flexors, abductors, quads and hamstrings

Goals:

- Eliminate Swelling
- Pain free active and passive ROM within set limitations
- Restore normal gait without deviations to distance of at least 300ft. without assistive device
- Increase leg strength to allow for:
 - Ambulation without assistive device
 - 1/3 knee bend without compensations
 - Single leg stance without Trendelenburg

Swelling:

- Continue with PRICE for residual swelling

Range of Motion:

- Continued PROM, AAROM and AROM – advance to full motion when cleared
- Quad and Hamstring stretching as indicated
- Advance to Low Load Prolonged Stretches as indicated
- Manual therapy as indicated for joint, capsular and soft tissue limitations.

Gait (walking) and ADL:

- Patient is encouraged to continue weaning from assistive device if this progression has already been started
- Continued use of assistive device may be necessary with gait deviations, such as antalgic gait and Trendelenburg pattern
 - Weaning from crutches or walker (see Phase 2)
 - Hydrotherapy –
 - Walk in water at shoulder level
 - Advance to walking at waist level
- Advance to ascending and descending stairs as tolerated

Strength:

- Hip exercises
 - Side lying open chain exercises in all directions
 - TheraBand Around the world exercise
 - Side Steps with TheraBand
 - Single leg stance, Glute Medius exercise
- Closed Chain Strength progression (Glutes and Quads)
 - Leg press with light weight and high repetitions beginning with double leg and advancing to single leg
 - Mini Squats, 1/3 knee bends
 - Double knee bends to 90°
- Hamstring Specific Exercises
 - Carpet Drags
 - Hamstring Curls
 - Physio-ball bridging with knee bends
- Calf Muscles
 - Heel-toe raising
 - Calf raises
- Cardio
 - Begin stationary bike with resistance
 - Elliptical trainer if tolerated

Proprioception, Balance and Neuromuscular Re-education:

- Begin double leg stability exercises on balance board
- Single leg balance on stable/semi unstable (foam) surface
- Single leg balance on balance board
- Variations of balance exercises with perturbation training
- Variations of balance exercises during alternate activity (i.e. ball tossing)

Phase 4- Advanced Strengthening

Post Op Week 15+

Criteria for Advancement to Phase 4:

- No residual swelling present
- Full Active and Passive ROM
- Ascending and Descending stairs with involved leg without pain or compensation
- At least 1 minute of double knee bends without compensations
- Single knee bends to 70° flexion without compensations

Goals:

- Restore multi-directional strength
- Restore ability to absorb impact on leg (plyometric strength)

Strength, Agility, Balance and Stability Training

- Increase time on double knee bends with resistance
- Increase time on single knee bends. Add resistance as tolerated
- Forward backward jog exercises with sport cord with minimal impact
- Lateral Agility exercise with minimal impact
- Advanced perturbation, balance and stability exercises
- Continue with cardio training
 - Add treadmill walking with incline, swimming and outdoor biking as tolerated
- Begin following sports at specified times or according to the discretion of surgeon and/or physical therapist
 - Mountain biking 4-5-6 months
 - Golf – 5 months
 - Sports involving running, cutting, and high-impact should be discussed with surgeon and physical therapist