

Purpose: The purpose of this protocol is to provide the Home Health Physical Therapist and Physical Therapist Assistant guidance in advancing a patient through the second of the three phases of therapy for patients who have undergone a primary Total Hip Arthroplasty. This is in no way a substitute for clinical decisions made by the PT/PTA based on physical exams and clinical findings. In the event that a therapist requires assistance in the progression of a post-surgical THA patient, he or she should contact the referring surgeon.

Pain Management: Proper pain management in the second and third phase of healing post TKA is critical in achieving full range of motion (ROM), proper functional strength and the transference of these improvements into safe and functional independence with ambulation, transfers and a return to community-based activities.

Pain management strategies may include:

- Taking pain medication as prescribed
- Scheduling the intake of pain medication approximately ½ hour prior to the scheduled treatment
- Performing self-directed ROM exercises before and after treatment
- Applying cold packs or other cryotherapy modalities after treatment

Movement Precautions:

- Posterior Approach
 - No hip flexion greater than 90°
 - No internal rotation past neutral
 - No Adduction past neutral
- Anterior Approach
 - o Active hip extension and external rotation is allowed
 - o Passive hip extension and external rotation should be avoided
- Lateral Approach
 - o Passive and Active hip extension and external rotation should be avoided

Phase 1: This phase is generally encountered in the hospital as it includes days 0-3. The goals for this phase is to decrease swelling, increase ROM, promote muscle control so that the patient can achieve an increased level of safety and independence with bed mobility, transfers and ambulation. The patient is also educated as to the precautions and considerations needed to promote safety and healing as they begin to recover.



Phase 2: (Week 1 - 3)

Goals:

- Improve active range of motion (AROM) of the surgical hip within the limits of the post-op precautions
- Muscle strengthening of the surgical limb, emphasis on hip extensors, flexors, abductors and adductors
- Muscle strengthening in other areas identified as being weak such as upper extremities, trunk or in the non-surgical lower extremity.
- Proprioceptive training to improve body and special awareness of the surgical limb during functional activities
- Endurance training to increase tolerance to activities
- Transfer training to focus on the actual surfaces the patient transfer to and from in his or her living environment, this includes vehicle transfers; special attention should be taken to maintain the post-op precautions.
- Gait training should be performed in the patient's living environment and should include specific training to and from functional areas such as, bathrooms, kitchen, living room and bedrooms. Assistive devices maybe discontinued once the patient demonstrates adequate strength in the surgical limb and balance during functional activities.
- Decrease inflammation and swelling
- Return to functional activities
- Become independent with the home exercise program

Therapeutic Exercises:

Weeks 1-3:

- AA/A/PROM, exercises in supine:
 - o Ankle Pumps
 - Heel Slides
 - Hip Abduction/Adduction/IR/ER
 - Hip Flexion/Extension (to be performed within precautions noted above)
- AA/A/PROM exercises in sitting:
 - o Long Arc Quads (LAQ)
 - o Ankle Pumps
 - Heel Slides
- Strengthening:
 - Quad Sets (in full knee extension)
 - o Glut Sets
 - Short Arc Quads (SAQ)
 - o Isometric hip adduction, pillow/towel squeeze (performed in hooklying)



• Gait Training to be performed with an assistive device (AD), goal is to wean from RW to cane or no AD when gait deficits diminish. Encourage proper gait pattern with special focus on single leg stance (SLS), trailing limb and heel strike and cadence.

Weeks 4-6:

- Continue above exercises
- Include Straight Leg Raise (SLR) into flexion, abduction and extension (let the timeframe for the precautions guide these movements.
- Lateral step up and step down with focus on eccentric control
- Balance exercises; SLS, may alter surface, eyes open/closed, with or without hand held assist
- Sit to stand activities
- Stair training

Please Note: Patient may progress to resistive exercises as tolerated in this phase.

Modalities: The use of Cryotherapy (ice packs and cold packs) may be used throughout the day, 1-3x per day if the patient does not have an open incision and does not have any sensory deficits over the surgical site.

Precautions:

- WBAT with the use of an assistive device to minimize the utilization of a compensatory gait pattern.
- Monitor wound healing and edema

Criteria for progression into the third phase:

- Pain free AROM of postoperative hip in all planes within constraints of precautions
- Appropriate voluntary control of the hip flexors, abductors, extensors and adductors

Phase 3: (7-12 weeks)

*Please Note: It is not uncommon for a patient in this phase to be treated at an outpatient physical therapy clinic. Also, patients who present with a past medical history



Example of written goals:

- STG: The patient will demonstrate sit to/from stand transfers from his primary household seat with modified independence 5/5 times without verbal or physical cues for safety while using proper body mechanics and maintaining hip precautions with 100% accuracy.
- LTG: The patient will ambulate on even and uneven surfaces without the use of an assistive devices, with equal step length and SLS time bilaterally independently x350 feet so that he can safely and independently access all functional areas in his home environment.

This physical therapy protocol only applies to a primary Total Hip Arthroplasty. A revision of a total hip arthroplasty or a resurfacing will require increased time in each phase. In the event that a surgeon has his or her own protocol it will supersede this protocol so long as it meets the physical therapy standards of care.