

HIP REPLACEMENT REHABILITATION PROTOCOL

The following is a protocol for post-operative patients following Total Hip Arthroplasty (TKA) rehabilitation. The primary goal of this protocol is to protect the reconstruction while steadily progressing towards maximizing functional potential. Each patient following reconstruction will progress at a different rate. Achieving the criteria of each phase should be emphasized more than the approximate duration.

Medications

- Tylenol (Acetaminophen) 500 mg 3x per day scheduled (unless there are contraindications)
- Celebrex (Celecoxib) 100 mg 2x per day scheduled (unless there are contraindications)
- Aspirin 81 mg 2x per day for 30 days scheduled. This is to prevent blood clots. For individuals at high risk of blood clots, we may have the PCP manage an alternative stronger blood thinner
- Oxycodone 5 mg up to every 4 hours as needed for pain. Try to minimize usage.
- Phenergan (Promethazine) 12.5 mg every 6 hours as needed for nausea/vomiting
- Colace (Dulcolax) 100 mg twice daily for constipation

Key Points

- After surgery you may put as much weight on your operated leg as you can tolerated (unless otherwise indicated by your surgeon)
- Elevation of your lower extremity periodically can help to reduce swelling
- Be sure to take prescribed medications that will aid in post-operative healing and pain control during PT
- Ice 10-15 minutes every 2-3 hours for the first week post-surgically
- Full functional return without restrictions should occur at approximately 12

Phase I – Post Op Phase (0-3 days postoperative):

Goals:

- Progressive reduction in swelling
- Protect range of healing tissue
- Begin to restore range of motion
- Independent with ambulation using rolling walker

Activities:

Range of Motion (ROM)

- Heel slides
- Ankle pumps
- Supine hip internal/external rotation

Strength

- Quad sets
- Glut sets
- Hamstring sets
- Supine hip abduction/adduction
- Long arc quads (LAQ)
- Seated hip flexion
- Short arc quads (SAQ)

Functional Mobility

- Bed mobility
- Transfer training
- Gait training on level surfaces
- Stair training
- ADL's with adaptive equipment as needed

Guidelines:

Perform 10 repetitions of all exercises 3-5 times a day. Use ice after exercising for 10-20 minutes

PHASE II – Mobility Phase (~3 days-6 weeks postoperative):

Goals:

- Begin to restore muscle strength throughout the operated leg
- Initiate proprioceptive training
- Normalize all functional mobility
- Demonstrate normal gait pattern with goal to wean all assistive devices at the end of this phase

Activities:

Range of Motion (ROM)

- Continue with all phase 1 ROM exercises

Strengthening

- Continue quad sets, glut sets, hamstring set
- Continue LAQ and seated hip flexion
- Bridging
- Standing hip flexion/ abduction/ adduction/ extension
- Progress to straight leg raises (SLR), hip abduction/ adduction/ extension against gravity towards the end of this phase
- Progress to closed chain exercises including terminal knee extensions, mini-squats, step ups, and mini-lunges by the end of this phase

Stretching

- Initiate gentle hamstring, gastroc/soleus, and quadriceps stretching

Proprioception

- Weight shifting activities
- Single leg stance Functional Mobility
- Gait training with appropriate device emphasizing normal gait pattern
- Stair training with appropriate device

Endurance

- Initiate stationary biking with minimal to no resistance 3-4 weeks post-op

Guidelines:

Perform 10-20 repetitions of all ROM, strengthening, stretching, and strengthening exercises. Hold stretches for 30 seconds and perform 2-3 repetitions of each. Bike daily for 5-10 minutes if able.

PHASE III – Strengthening Phase (~6-12 weeks postoperative):

Goals:

- Restore Normal strength
- Return to baseline functional activities

Activities:

Range of Motion and Stretching

- Continue ROM exercises from phase 1 and 2 until ROM normalized

Strengthening

- Continue with phase 2 exercises adding and increasing resistance as tolerated
- Add resistance machines as appropriate including leg press, hamstring curl, and 4-way hip machine
- Emphasize eccentric control of quadriceps and hip abductors with closed chain exercises

Proprioception

- Single leg stance ☐ Static balance on Bosu/wobble board/foam/etc
- Add gentle agility exercises (i.e. tandem walk, side stepping, backwards walking)

Endurance

- Continue biking, adding mild to moderate resistance as tolerated
- Begin walking program

Guidelines:

Perform ROM and stretching exercises once a day. Hold stretches for 30 seconds and perform 2-3 repetitions of each. Perform strengthening exercises 3-5 times a week. Do 2-3 sets of 15-20 reps. Progress to biking/walking for 20 minutes 3x/week for endurance.

PHASE IV – Advanced Phase (>12 weeks postoperative):

Goals:

- Continue to improve strength to maximize functional outcomes
- Work with PT and MD to create customized routine to allow return to appropriate sports/recreational activities

Activities:

ROM and Flexibility

- Continue daily ROM and stretching exercises

Strengthening

- Continue with all strengthening exercises increasing resistance and decreasing repetitions

Proprioception

- Continue with all phase 3 exercises, increasing difficulty as tolerated.

Endurance

- Continue with walking, biking, elliptical machine programs

Functional Progression

- Activity/sport-specific training exercises

Guidelines:

Perform ROM and flexibility exercises daily. Perform strengthening and proprioception exercises 3-5x/week, performing 2-3 sets of 10-15 repetitions. Continue endurance program 30-45 minutes 3x/week