



CEMENTLESS TOTAL HIP REPLACEMENT

General Principles:

Total hip replacement procedures will be divided into two categories based primarily on the method of prosthesis fixation utilized. These categories will be designated as **Hybrid Total Hip Replacement** and **Cementless Total Hip Replacement** protocols.

Due to extreme physical variances in the patient population undergoing a total hip replacement surgery, the following protocols are designed to provide guidelines for the clinician to progress patients during their rehabilitation. The clinician may alter patient progress to accommodate these physical variations (i.e., age, medical problems, cardiovascular conditioning, etc.).

The following routine **Total Hip Activity Precautions** should be observed at all times for **(How long to follow precautions):**

Posterior Approach

1. No adduction past the midline.
2. No flexion past 100 degrees.
3. No internal rotation past 10 degrees.

AnteroLateral/Direct Lateral Approach

1. No active hip abd
2. No active hip extension
3. Do not cross legs/No external rotation

Anterior Muscle Sparing

1. No Hip extension with adduction behind the contralateral leg

PHASE I (Immediate Post-Op) DAY 1 - 7:

Weight Bearing

1. Touch weight bearing with use of two crutches and/or walker.

Modalities

1. Ice pack 20 minutes, three time a day.
2. Moist heat and/or pulsed ultrasound after 48 hours.

Orthotics

1. Abduction pillow at all times except when ambulating and exercises.
2. T.E.D.TM hose at all times unless discharged by physician.

Exercises

1. Gluteal sets.
2. Quad sets.
3. Ham sets.
4. Heel slides.
5. Supine hip abduction.
6. Straight leg raises
 - a. Flexion, extension, abduction.
7. Short-arc quad/hams
 - a. Progress resistance as appropriate
8. Gait/transfer training per physician weight bearing restrictions.
9. Ankle pumps.
10. AAROM exercises as appropriate to surgery and above precautions:
 - a. External rotation, extension, flexion
 - b. Teach and encourage patient to put foot into tailor's position.
 - c. Prone stretches if needed.

PHASE II: (Immediate) Week 2 - 3

Weight Bearing

1. Touch with use of two crutches/walker.

Modalities

1. Continue Phase I modalities as needed.

Orthotics

1. Use abduction pillow at night only.
2. T.E.D.TM hose at all times unless discharged by physician.

Exercises

1. Continue Phase I exercises.
 - a. Progress resistance, duration, frequency as tolerated.
2. Start full-arc quad / ham resistive exercises
 - a. Progress resistance as appropriate
3. Closed-chain exercises.
4. Functional activities.
 - a. Activities of daily living.
5. Recumbent bike without resistance and within appropriate hip precautions
6. Aquatics may be started after wound is fully healed and surgical staples are removed.

Week 4 - 6:

Weight Bearing

1. Progress to 33% at Week 4, 66% at Week 5, and full at Week 6 as tolerated.
Assess pain and only progress if no symptoms develop. May progress to use of a cane as tolerated.

Manual therapy

1. Soft tissue mobilization with and without tools on surrounding musculature as needed for tissue release

Modalities

1. Continue only as needed.
2. Ice may be used after exercises

Orthotics

1. May discontinue abduction pillow.
2. May discontinue T.E.D.TM hose.

Exercises

1. Progress Phase I exercises as appropriate:
 - a. Resistance.
 - b. Endurance.
2. Closed chain activities:
 - a. Shuttle (bilateral progress resistance as tolerated)
3. When weight bearing is full, and patient can tolerate, begin proprioceptive exercises:
 - a. Weight shifts.
 - b. Two legged balance, progress to one leg.
4. Recumbent bike without resistance or Nu-step when full WB'ing within appropriate hip precautions
5. Aquatics:

PHASE III: (Advanced) Week 7 - 8

Weight Bearing

1. Should be full with normal gait.

Modalities

1. Only as needed.

Orthotics

1. None

Exercises

1. Progress Phase II exercises.
2. Advance proprioceptive exercises as appropriate:
 - a. Unilateral.
 - b. Eyes closed.
3. Closed chain activities when appropriate:
 - a. Unilateral shuttle (progress resistance).
 - b. Elliptical/ARC trainer.
5. Consider dismissing from formal rehabilitation when strength and functional goals have been met and after physician approval.
6. Home exercise program.
7. Refer to fitness center.