

Hip Fracture Fixation: Intramedullary Nail

Core Rehabilitation Guidelines

- 75% weight bearing for 2 weeks with goal of weaning off assistive devices by first visit
- Full weight bearing after 2 weeks
- Post-op appointments with Dr. Ramkumar: 2 weeks, 6 weeks, 12 weeks, 6 months, 1 year
- Everyone will progress through the guidelines at their own pace.
- The goal is to minimize narcotics, try to get you social assistance, and have you up and moving as much as possible

Specific Timeline: Weeks 0-2

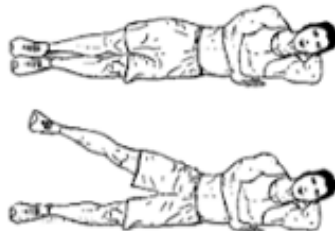
- Precautions:
 - 75% weight bearing with assistive device (crutches or walker)
 - Monitor for hip flexor tendonitis, trochanteric bursitis and anterior knee pain
 - Wound care
 - Assessment:
 - Precaution awareness, as listed above
 - Gait pattern with assistive device
 - Brace maintenance
 - Bed mobility and transfers
 - Understanding of continuous passive motion machine
 - Activity modification inside and outside of the home
 - Patient and family education
 - Treatment Recommendations:
 - No formal physical therapy until after 6 week follow up
 - Gait training with weaning off assist devices and progression to full weight bearing by 6 weeks
 - Home Exercise Program
 - Ankle pumps
 - Quadriceps sets
 - Dangles for stretching: Find a stool or lower chair. Place your knees at shoulder width. Bring your hands down towards your ankles and hold when you feel the stretch. Don't bounce or continue if you have a lot of pain. Repeat for a set of 10.
- Pictured below:



- Patient Education
 - Rehabilitation timeline
- Activity modification
 - Icing, frequently during the day in 20-30minute increments
- Advancement Criteria:
 - 2 week follow up with Dr. Ramkumar
 - Progress weight bearing to as tolerated, wean off assistive device, after clearance from Dr. Ramkumar at 2 week visit
 - Initiate formal **home rehabilitation program** or **outpatient therapy** (if patient prefers)

Home Rehabilitation Regimen: Week 3 and Beyond

- Hip exercises
 - Abductor exercises
 - Laying on your non-operative side with a slight bend in the bottom leg, keep your toes pointed forward and keep your knees straight. Then, bring your leg up in a scissor motion. Perform this 90 times a day (30 in the



morning, afternoon, evening). This will help maintain your balance and get you walking straight.

- You may also recreate this exercise standing!
- Straight leg raises: keep your leg straight, elevate it without any weight/resistance

- Walking
 - Dr. Ramkumar recommends you walk as much as you feel comfortable (at least 2-3 times a day), trying to walk a little further each time. We want you to normalize your gait. You may walk inside or outside as you feel comfortable. As a rough guideline, patients can walk up to 1 mile at a time by 2 weeks after surgery. My best advice to you during your recovery is to listen to your body. That means that if you feel pain during an exercise or afterwards, you have probably overdone it.
- Precaution adherence
 - Progress to full weight bearing as tolerated without assist devices
 - Fall precautions

*Specific Timeline **If you Prefer Outpatient Physical Therapy**: Weeks 3 and Beyond*

- Precautions:
 - Anterior hip precautions, no bridging – for 12 weeks
 - Avoid premature progression of activity level – weight bearing as tolerated by after week 2
 - Gait deviations
 - No increase in symptoms with progressions
- Assessment:
 - Gait pattern with weight bearing progressions and assistive device
 - Scar and soft tissue mobility
 - Range of motion in lower extremity
 - Strength in lower extremity
 - Bed mobility and transfers
 - Functional movement patterns – control, quality, alignment
 - Bilateral leg squat
 - Single leg stance
 - Activity modification and tolerance inside and outside of the home
- Treatment Recommendations:
 - Gait training, with assistive device (crutches or walker)
 - Progress weight bearing from 75% weight bearing to WBAT after week 2
 - Assistive device weaning as tolerated
 - May use cane after crutches or walker are discharged
 - Manual therapy
 - Scar massage
 - Soft tissue to hip flexors and glutes as needed and tolerated
 - Passive range of motion to hip flexion
 - Gentle hip external and internal rotation, abduction
 - Stretching of hip flexors
 - Stretching
 - Self-stretching to hip flexors and calf
 - Quad rocking - gentle
 - Balance

- Weight shifting
- Double leg to single leg
- Floor, foam, board, etc
- Functional movements
 - Mini squats for sit to stand
 - Transfers
 - Stair navigation
 - Ergonomics
- Strengthening
 - Isometric hip adduction, hip extension and external rotation
 - Quadriceps sets to short arc quads
 - Prone gluteal squeezes and progress to bridges
 - Standing strengthening for lower extremity as tolerated
 - Calf raises, mini squats, hip extension
 - Core strengthening
 - Pelvic tilts
 - Hooklying marches/taps
 - Hooklying with upper extremity movements
 - Standing strengthening as tolerated
 - Stationary bicycle
 - Isometric hip abduction progression (approximately 8-10 weeks post-op)
 - Isometric bent knee fall-out
 - Supine hip abduction isometric
 - Aquatic therapy, if available
 - Home Exercise Program - dictated by your physical therapist
 - Icing – daily as needed and tolerated
- Advancement Criteria:
 - Compliance with self-care, activities of daily living and activity modification
 - Gait pattern normalized (may need cane for prolonged ambulation)
 - Range of motion within normal limits (except adduction)
 - No increased pain with increased activity
 - Single leg stance for 10 seconds with no trunk or hip deviations
 - Perform sit to stand with minimal upper extremity support
 - Follow up appointment at approximately 6 and 12 weeks with Dr. Ramkumar
- Discharge Criteria:
 - Compliance with self-care, activities of daily living and activity modification
 - Pain free or manageable discomfort with ADLs and activity progression
 - Full active and passive range of motion
 - Perform squat with good symmetry
 - Ascend and descend 6”-8” step with good quality and control
 - Single leg stance > 20 seconds without trunk or hip deviations
 - Independent floor transfers