

INTRAMEDULLARY NAIL FIXATION FOR FEMORAL SHAFT FRACTURE

<u>Postop</u>	<u>Goals</u>	<u>Precautions</u>	<u>Exercises/Interventions</u>
POD 1 1-2 x/ week HEP Daily Progress to Phase 2 as medically appropriate	Increase pain-free ROM Control pain and inflammation Promote independent ambulation with assistive device	WBAT (TTWB may be necessary depending on fracture pattern) No stress to fracture site Activity: WBAT with assistive device	Ankle pump Quad set, assisted SLR for flexion SAQ (no resistance) in supine if pain-free Heel slides and standing hamstring curls (avoid forced knee flexion) Passive knee extension stretching Gait training with assistive device Instruct in compression, ice and elevation
Phase 2: 2x/ week HEP Daily Progress to Phase 3 as medically appropriate	Continue to address goals above Improve strength and mobility Progression to full weight bearing (FWB)	WBAT to FWB	Quad re-education (electrical stim as needed) SLR for flexion with good quad recruitment (stand -> sitting -> supine) with minimal extensor lag Initiate side lying hip abduction/adduction strengthening if pain free If pain present with above, substitute with active assisted hip abduction Initiate Stationary bike with no resistance (avoid forced knee flexion) Progress weightbearing to FWB and discontinue assistive device as AROM increases with good quad control Continue swelling control as needed
Phase 3: 2x/ week HEP Daily Progress to Phase 4 as medically appropriate	>120 degrees of knee flexion Increase LE strength Improve balance/proprioception for functional progression LATE PHASE: independent with stairs and no assistive device, SLS for over 15 sec	More aggressive rehab is dependent on x-ray evaluation of healing at fracture site	Continue with hip and quad re-education Transition SLR for flexion to supine and progress to 1-2# as tolerable (at thigh) Standing TKE against resistance band Progress weight on SAQ AROM activities: stationary bike progression with AROM is adequate (over 100 degrees) LATE PHASE: Strengthening (closed chain activities): mini squats to 30 degrees, wall sits at 30 degrees,

			stool scoots, leg press, lateral step ups on 4" step Initiate balance and proprioception activities with emphasis on static, SLS with progression to dynamic activities
Phase 4: 2x/ week HEP Daily	<p>Normalize strength, proprioception, and endurance Prepare for return to sport or occupation Restore confidence in performance of lower extremity</p> <p>To enter phase IV: AROM: full, non-antalgic gait, and be able to ascend/descend stairs with reciprocal gait</p>	Pain and inflammation control	<p>Strengthening: double leg to single leg, concentric to eccentric, emphasis placed on closed chain strengthening Continue with balance and proprioception activities with emphasis on progressing from double to single leg activities and stable to unstable surfaces Continue to progress cardiovascular endurance activities</p>