

Hardware Removal (Hip)

Post-Operative Rehabilitation · General Guideline

Few formal published rehabilitation protocols exist for isolated hip/proximal femoral hardware removal; recovery is typically driven by wound healing and comfort. This general guideline is synthesized from a published removal-of-hardware post-operative protocol and from literature documenting stress-riser fractures through residual screw holes in the proximal femur. Defer to the operating surgeon on weight bearing and impact restrictions.



AT A GLANCE

TIMELINE	2-6 weeks for return to most activities; residual swelling can persist for several months
WEIGHT BEARING	WBAT immediately in most cases, with crutches or cane for comfort the first 1-2 weeks; protected WB or temporary impact restriction if the surgeon has stress-riser concerns at residual screw holes
KEY MILESTONES	Wound healed and sutures removed ~2 weeks; non-antalgic gait without aid by 2-4 weeks; return to full duties/activity around 6 weeks
RETURN TO ACTIVITY	Sedentary work within days; gradual return weeks 2-4; demanding work and higher-impact recreation ~6 weeks or per surgeon, delayed further where refracture risk through screw holes is a concern

KEY PRECAUTIONS

- Residual screw holes in the proximal femur act as stress risers; avoid running, jumping, and other impact loading until the surgeon-directed interval has passed (fractures through old screw tracks are reported after hip hardware removal).
- Keep the incision dry for ~2 weeks and monitor for erythema, drainage, or fever, particularly if hardware was removed for suspected low-grade infection.
- New or escalating groin, thigh, or lateral hip pain after activity progression warrants prompt surgeon review before continuing loading.

PHASED REHABILITATION

PHASE 1 — WOUND HEALING & GAIT NORMALIZATION		Weeks 0-2
GOALS	- Protect wound healing - Normalize gait with assistive device weaning - Maintain hip mobility and activation	
INTERVENTIONS	- WBAT with crutches or cane for comfort, weaning as gait normalizes (unless surgeon specifies protected WB) - Wound care: keep dressing dry; sutures/staples removed ~2 weeks - Ankle pumps, quad and glute sets, gentle hip AROM in all planes - Short, frequent walking bouts on level surfaces; avoid impact and pivoting - Edema and pain management (ice, elevation as needed)	
CRITERIA TO ADVANCE	- Wound healed without drainage - Non-antalgic or near-normal gait with minimal support - Pain controlled without narcotics	

PHASE 2 — PROGRESSIVE STRENGTHENING & RETURN TO ACTIVITY		Weeks 2-6
GOALS	- Restore hip abductor and global lower-limb strength - Gradual return to work, driving, and recreation	
INTERVENTIONS	- Progressive hip strengthening: bridges, clamshells, side-lying abduction, sit-to-stand, step-ups - Stationary bike and pool walking once the wound is fully sealed (~4 weeks for immersion) - Gait and single-leg balance work as needed; scar mobilization once healed - Graded return: sedentary duties early, moderate duties weeks 2-4, full/demanding duties ~week 6 - Impact activities (running, jumping) only after the surgeon-directed stress-riser interval, typically 6+ weeks with a graded progression	
CRITERIA TO ADVANCE	- Independent ambulation without assistive device on all surfaces - Hip strength functionally symmetric (single-leg stance with level pelvis, comfortable stairs) - Return to most activities by ~6 weeks - Surgeon clearance for impact loading	

GUIDING PRINCIPLES

This protocol follows criterion-based progression over rigid time-based advancement; phased rehabilitation balancing tissue healing with controlled stress application; objective milestones (ROM, strength LSI, functional testing) to guide phase transitions; individualization based on surgical findings, tissue quality, and patient factors; and ongoing surgeon–therapist communication throughout recovery.

REFERENCES

- Marsh A. Removal of Hardware - Post-Operative Protocol. <https://www.marshortho.com/removal-of-hardware-protocol>
- Femoral neck fracture following hardware removal. PubMed PMID 22229620. <https://pubmed.ncbi.nlm.nih.gov/22229620/>
- Effect of screw tunnels on proximal femur strength after screw removal: A finite element analysis. Orthop Traumatol Surg Res. 2022. <https://www.sciencedirect.com/science/article/pii/S1877056822002511>

For clinical use by licensed physical therapists treating patients of Robert Pettit, MD. This document is a rehabilitation guideline, not a substitute for clinical judgment. Progression must be individualized based on intraoperative findings, tissue quality, and patient response. Scan the QR code for the current version of this protocol.