CLINICAL PATIENT INFORMATION LEAFLET | SURGICAL REHABILITATION

Hip Surgery Prehab & Rehab: Your Pathway to Joint Recovery

Evidence-based pre-operative conditioning, surgical approach precautions, and staged rehabilitation protocols.

Hip surgeries—including Total Hip Arthroplasty (THA), hip resurfacing, labral repairs, and femoroacetabular impingement (FAI) osteochondroplasty—are transformative procedures designed to alleviate severe joint pain and restore functional mobility. Optimal outcomes rely on proactive physical conditioning before admission and coordinated rehabilitation after surgery. Structured **prehabilitation ('prehab')** primes your pelvic stabilizers and familiarizes you with movement precautions, while a staged **post-operative rehabilitation** pathway restores hip abductor strength, normalizes gait biomechanics, and protects the surgical repair.

1. Why Prehabilitation (Prehab) Matters

- **Gluteal & Core Conditioning:** Strengthening the gluteus medius, maximus, and deep pelvic stabilizers before surgery counteracts post-operative Trendelenburg lurching and restores early pelvic levelness during walking.
- **Surgical Precaution Training:** Rehearsing approach-specific movement restrictions (e.g. posterior vs. anterior precautions) before surgery embeds safe motor habits into daily routines.
- **Gait Aid & Stair Familiarization:** Practicing walking with crutches or a frame and mastering stair climbing ('up with the non-operated leg, down with the operated leg') minimizes fall risks immediately following surgery.
- **Home Ergonomics & Assistive Devices:** Installing raised toilet seats, shower chairs, long-handled reachers, and firm high-seated armchairs prevents hip hyperflexion and reduces early post-operative hip strain.
- **Systemic Risk Reduction:** Smoking cessation, strict blood sugar control, and nutritional optimization accelerate soft-tissue healing and bone ingrowth around implants.

2. Staged Post-Operative Rehabilitation Protocol

Phase & Timeline	Clinical Objectives	Precautions & Restrictions	Core Exercise Protocols
Phase 1: Protection & Early Mobility ***(Weeks 0–2)***	• Safe independent transfers. • Swelling & pain control. • Gluteal motor reactivation. • Non-antalgic assisted gait.	• Adhere to approach precautions. • **Posterior:** No flexion >90°, adduction past midline, or internal rotation. • **Anterior:** Avoid hyperextension/external rotation. • Use gait aids at all times.	• Isometric gluteal squeezes & quad sets. • Ankle pumps for venous return. • Gentle heel slides (within flexion limits). • Supine hip abduction (in neutral). • Bedside transfer & gait retraining.
Phase 2: Strength & Gait Normalization ***(Weeks 2–6)***	• Restore level pelvic gait. • Wean from frame/crutches to single stick. • Reciprocal stairs. • Improve hip active range.	• Avoid sudden pivoting on operated limb. • Avoid low seats causing >90° hip bend. • No forced passive stretching into pain. • Keep legs uncrossed when sitting.	• Standing hip abduction & extension. • Mini-squats (0°–45°) & shallow step-ups. • Stationary cycling (high seat to limit flexion). • Bridging (avoiding excessive hip hyperextension). • Proprioceptive single-leg balance.
Phase 3: Pelvic Stability & Kinetic Chain ***(Weeks 6–12)***	• Eliminate limp (Trendelenburg sign). • Independent unassisted walking. • Restore baseline abductor strength. • Return to driving (if cleared).	• Controlled progressive loading only. • Avoid ballistic directional cuts. • Monitor for hip flexor or trochanteric tendon irritation.	• Side-lying clams & lateral band walks. • Leg press & functional lunges/step-downs. • Romanian deadlifts for posterior chain. • Dynamic balance boards & perturbation drills. • Hydrotherapy (once wounds fully healed).
Phase 4: Functional Conditioning & Return to Life ***(Months 3–6+)***	• Full functional endurance. • High-level balance & agility. • Return to golf, hiking, cycling, and occupational duties.	• High-impact running or contact sports require explicit surgeon clearance. • Maintain lifelong joint-friendly activity.	• Advanced resistance gym training. • Multi-planar functional movement drills. • Low-impact cardio (swimming, cycling, elliptical). • Occupational lifting and simulation tasks.

3. The Multidisciplinary Hip Care & Rehabilitation Team

A successful hip recovery depends on seamless coordination across medical, surgical, and therapy specialists:

- **Orthopaedic Surgeon:** Performs the arthroplasty or joint preservation surgery, selects the surgical approach, sets individual weight-bearing and movement restrictions, monitors prosthetic fixation on imaging, and clears milestone advancements.
- **Rehabilitation Medicine Physician:** Leads the comprehensive medical rehabilitation program, manages post-operative analgesia to facilitate active exercise, optimizes medical co-morbidities, addresses neuropathic symptoms or trochanteric pain, and oversees coordinated discharge pathways.
- **Physiotherapist:** Guides progressive weight-bearing, retrains abductor muscle recruitment, corrects compensatory lumbopelvic movements, guides stair re-education, and manages balance progression.
- **Occupational Therapist:** Assesses daily living independence, prescribes assistive dressing aids (sock aids, long-handled shoe horns), evaluates home furniture heights and bathroom safety, and facilitates safe home transition.
- **Exercise Physiologist:** Delivers progressive mid-to-late stage gym reconditioning, targets multi-joint functional loading, and oversees safe return to demanding recreational activities or work duties.

4. Practical Daily Guidelines & Dislocation Precautions

- **Understand Your Hip Precautions:** If your surgery involved a posterior approach, strictly avoid bending past 90 degrees, crossing your legs, or twisting inward for the first 6 to 12 weeks. If anterior, avoid extreme extension and outward twisting.
- **Sit on High, Firm Chairs:** Low or sunken sofas force your hip into deep flexion, increasing joint stress and dislocation risk. Use chairs with armrests and a firm seat base above knee height.
- **Manage Swelling and Cryotherapy:** Apply cold packs wrapped in a cloth over the hip for 15 to 20 minutes several times daily. Elevate your legs when resting and perform ankle pumps to encourage venous blood flow.
- **Use Assistive Dressing Devices:** Use a long-handled shoe horn, sock aid, and reacher to dress your lower body. Do not bend forward to pull on shoes or socks while sitting on low stools.

5. Warning Signs Requiring Immediate Medical Attention

Promptly contact your surgical team, rehabilitation physician, or emergency department if you develop:

- Sudden severe groin, hip, or buttock pain accompanied by a 'popping' sensation or joint deformity (signs of dislocation).
- Inability to bear weight or acute shortening/external rotation of the operated leg.
- Persistent calf pain, tenderness, heat, or asymmetric swelling (signs of Deep Vein Thrombosis / DVT).
- Spreading wound redness, heat, purulent drainage, or persistent fever (>38°C) and chills.

Hip Prehab & Rehab Pathway | Practice Attachment

This leaflet is designed as a patient educational guide. Because surgical techniques, implant designs, and surgical approaches (anterior vs. posterior/lateral) vary, always adhere strictly to the individual timeline and movement restrictions given by your Orthopaedic Surgeon and Rehabilitation Physician.