CLINICAL PATIENT INFORMATION LEAFLET | SURGICAL REHABILITATION

Shoulder Surgery Prehab & Rehab: Your Pathway to Recovery

Evidence-based pre-operative preparation, biological healing timelines, and staged rehabilitation protocols.

Shoulder surgeries—including rotator cuff repairs, labral reconstructions, subacromial decompressions, and shoulder replacements (anatomic or reverse arthroplasty)—involve delicate soft tissue healing alongside complex joint biomechanics. True functional recovery does not begin in the operating room; it begins weeks prior. Structured **prehabilitation ('prehab')** builds physiological and functional reserve, while targeted **rehabilitation ('rehab')** methodically restores mobility, scapulothoracic rhythm, and dynamic strength while protecting healing repairs.

1. Why Prehabilitation (Prehab) Matters

- **Optimizing Tissue Quality & Baseline Motion:** Maintaining pain-free range and baseline activation in the rotator cuff and scapular stabilizers provides optimal tissue conditions for surgical fixation.
- **Neuromuscular Priming:** Rehearsing scapular setting, postural alignment, and cervical mobility exercises pre-operatively accelerates post-operative therapy compliance and motor relearning.
- **Practical Home & Life Adaptations:** Practicing single-handed activities of daily living (dressing, hygiene, food prep) and organizing front-button or loose-fitting shirts prior to admission reduces immediate post-op stress.
- **Sleeping Arrangement Setup:** Sleeping semi-reclined in an armchair or supported by wedge pillows is typically required for the initial 4 to 6 weeks to prevent shoulder extension and painful nocturnal capsular stretch.
- **Systemic Health Optimization:** Smoking cessation, strict glycemic control in diabetic patients, and balanced protein intake significantly improve tendon-to-bone integration and reduce infection risks.

2. Staged Post-Operative Rehabilitation Protocol

Phase & Timeline	Clinical Objectives	Precautions & Restrictions	Core Exercise Protocols
Phase 1: Protection & PROM ***(Weeks 0–6)***	• Protect surgical repair/implant. • Control post-op inflammation. • Prevent adhesive capsulitis.	• **Strict sling immobilisation** day & night (except hygiene/rehab). • **No active shoulder lifting**. • No reaching behind the back.	• Passive Range of Motion (PROM) per surgeon limits (e.g. table slides). • Gentle pendulum swings. • Active wrist, hand, elbow motion. • Scapular retractions & neck stretches.
Phase 2: Active-Assisted & Early Active ***(Weeks 6–12)***	• Progressive sling weaning. • Full active-assisted motion. • Initiate early active range.	• No heavy lifting, pushing, or pulling. • Avoid jerky overhead motion. • Stop if sharp anterior pain occurs.	• Wand/pulley-assisted elevation and external rotation. • Wall crawls & supine active-assisted movement. • Submaximal isometric rotator cuff setting. • Serratus anterior/lower trap activation.
Phase 3: Dynamic Strengthening ***(Weeks 12–18)***	• Restore full active range. • Rebuild dynamic cuff strength. • Re-establish scapular rhythm.	• Graduated resistance only. • Avoid rapid explosive loading. • Monitor for impingement symptoms.	• Light resistance bands (internal/external rotation in neutral). • Prone scapular series ('Y', 'T', 'W'). • Closed kinetic chain loading (wall press-ups, quadruped weight shifts).
Phase 4: Advanced Conditioning ***(Months 4–6+)***	• Muscular power & endurance. • Full kinetic chain integration. • Return to work and sport.	• Pain-free progression only. • Must be cleared by surgical and rehabilitation team.	• Functional multi-joint movement patterns. • Sport/work-specific drills (throwing mechanics, overhead reaching). • Occupational simulated lifting.

3. The Multidisciplinary Surgical & Rehabilitation Team

Optimal shoulder recovery requires close clinical harmony between surgical precision and structured functional re-education:

- **Orthopaedic Surgeon:** Performs the surgical reconstruction or joint replacement, defines procedure-specific range-of-motion limits, monitors anatomical healing on follow-up imaging, and clears structural progression.
- **Rehabilitation Medicine Physician:** Leads the non-surgical recovery plan, manages complex post-operative pain or neuropathic symptoms, optimizes musculoskeletal biomechanics, treats secondary stiffness, and coordinates milestone progression with allied health.
- **Physiotherapist:** Delivers hands-on passive mobilization, guides exercise progressions from assisted movements to loaded resistance, corrects compensatory upper trapezius dominance, and restores scapulothoracic rhythm.
- **Occupational Therapist:** Assists with proper immobilizer fitting, provides adaptive equipment for single-handed independence, assesses home/workplace ergonomic demands, and guides gradual vocational reintegration.

4. Practical Daily Guidelines for Patients

- **Respect the Sling Immobiliser:** Your sling is not just for comfort; it protects delicate suture anchors and tendon-to-bone interfaces from excessive tensile strain. Never discontinue sling use without explicit clearance.
- **Manage Swelling and Cryotherapy:** Apply ice packs over the dressing for 15 to 20 minutes several times daily. Take prescribed analgesia proactively during the acute phase rather than waiting for severe pain to escalate.
- **Maintain Posture and Scapular Alignment:** Avoid habitual slumping or rolling the shoulder forward, which narrows the subacromial space. Keep your spine upright and chest open to reduce cervical and upper back muscle spasm.
- **Move Peripheral Joints Daily:** Regular active movement of your fingers, wrist, and elbow (when supported) maintains microcirculation, prevents regional stiffness, and minimizes post-operative limb swelling.

5. Warning Signs Requiring Immediate Medical Attention

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

- Sudden, sharp increase in pain accompanied by a 'popping' or 'tearing' sensation.
- Spreading redness, skin warmth, wound breakdown, or persistent purulent drainage from incision sites.
- Systemic fever (>38°C), chills, or severe nocturnal sweating.
- Progressive numbness, tingling, or motor weakness in your hand or fingers, or severe calf pain and swelling.

Shoulder Prehab & Rehab Pathway | Practice Attachment

This leaflet is designed as a patient educational guide. Because specific surgical techniques, tissue quality, and anchor security vary, always adhere strictly to the individual timeline and precautions provided by your Orthopaedic Surgeon and Rehabilitation Physician.