



Cubital Tunnel Release: Rehabilitation Protocol



Cubital tunnel release is a surgical procedure to relieve pressure on the ulnar nerve at the elbow. This procedure is commonly performed when non-surgical treatments have failed and symptoms such as numbness, tingling, or weakness in the hand persist. Recovery involves a structured rehabilitation process to restore function, strength, and range of motion while protecting the healing tissues.

Rehabilitation Goals

- Protect the surgical site and allow healing
- Reduce pain and swelling
- Restore range of motion (ROM)
- Improve strength and function in the arm and hand
- Prevent recurrence of symptoms



Expected Recovery Time

Milestone	Timeframe
Pain and swelling reduced	1–3 weeks
Return of light hand use	2–4 weeks
Near full range of motion	4–6 weeks
Strengthening phase begins	6–8 weeks
Return to full activities	8–12 weeks
Full recovery in nerve function	Up to 6–12 months

Phase 1: Early Post-op (0–2 weeks)

Goals

- Protect surgical site
- Control pain and swelling
- Begin gentle hand and wrist mobility

Instructions

- Keep the incision clean and dry
- Keep the elbow elevated above heart level to reduce swelling
- Apply cold packs for 10–15 minutes several times daily (avoid direct contact with skin)
- Avoid lifting, gripping, or pressure on the elbow

Exercises

- Finger and wrist range of motion: Flex and extend fingers and wrist 5–10 times every hour while awake
- Shoulder shrugs and circles to maintain shoulder mobility
- Elbow movement is usually limited at this stage—follow your surgeon's instructions



Phase 2: Intermediate Recovery (2–6 weeks)

Goals

- Gradually increase elbow range of motion
- Resume light daily activities
- Continue pain and swelling management

Instructions

- Stitches are usually removed around 10–14 days post-op
- Begin gentle elbow flexion and extension as advised
- Avoid lifting more than 0.5–1 kg
- Use the hand for light activities only (e.g., typing, eating)

Exercises

- Elbow flexion and extension within comfort range (3–5 sets of 10 reps per day)
- Wrist and forearm strengthening with light resistance (e.g., squeezing a soft ball)
- Nerve gliding exercises as instructed by your therapist

Phase 3: Strengthening Phase (6–10 weeks)

Goals

- Restore full range of motion
- Begin strengthening exercises
- Resume moderate activity levels

Instructions

- Avoid high-impact activities or heavy lifting
- Resume work activities if they are light or sedentary
- Continue regular exercises to promote circulation and strength

Exercises

- Full elbow range of motion stretching
- Progressive resistance training for the hand, wrist, and forearm
- Ulnar nerve gliding exercises as tolerated
- Grip strengthening using therapy putty or hand exercisers



Phase 4: Return to Activity (10–12+ weeks)

Goals

- Return to full function
- Resume previous work or recreational activities
- Maintain strength and flexibility

Instructions

- Gradually return to activities requiring repetitive elbow use
- Avoid prolonged elbow flexion (e.g., resting elbows on hard surfaces)

Exercises

- Sport- or job-specific functional training
- Continued strengthening and flexibility routine
- Monitor for recurrence of symptoms during increased activity

When to Contact Your Surgeon

- Signs of infection (increased redness, warmth, swelling, drainage, or fever over 38°C)
- Persistent or worsening pain not relieved by medication
- Numbness or tingling that worsens after surgery
- Loss of movement or strength in the hand or arm
- Opening of the incision or unusual bleeding

Note: This is a general guideline. Your physiotherapist or surgeon may adjust the protocol based on your specific condition and progress.