



Proximal Row Carpectomy — Rehabilitation Protocol

Overview

- Applies to: proximal row carpectomy (PRC) for SLAC/SNAC wrist or Kienböck's disease
- Procedure involves excision of scaphoid, lunate, and triquetrum
- PRC preserves motion better than four corner fusion but with reduced load capacity
- Capitoulunate articulation quality determines outcome — discuss intraoperative findings with surgeon

Rehabilitation Phases

Phase 1 — Immobilisation	Weeks 0–6
<p>Goals:</p> <ul style="list-style-type: none">• Allow soft tissue healing• Control pain and swelling• Maintain digital function	<p>Exercises & Interventions:</p> <ul style="list-style-type: none">• Below-elbow cast (wrist slight extension) for 4–6 weeks• Finger and thumb AROM immediately• Shoulder AROM (elevation/rotation)• Elbow AROM• Elevation and edema management• Cryotherapy above cast if accessible
<p>Precautions:</p> <ul style="list-style-type: none">■ No wrist movement■ No weight bearing through wrist■ No cast removal until surgeon review	
Phase 2 — Wrist Motion	Weeks 6–10
<p>Goals:</p> <ul style="list-style-type: none">• Initiate wrist flexion/extension and forearm rotation• Prevent wrist joint stiffness• Restore tendon gliding	<p>Exercises & Interventions:</p> <ul style="list-style-type: none">• Transition to removable thermoplastic splint Week 6• Active wrist flexion/extension AROM (gravity-eliminated initially)• Forearm pronation/supination AROM• Tendon gliding exercises• Light grip strengthening (putty)• Gentle passive wrist mobilisation• Scar massage from Week 6
<p>Precautions:</p> <ul style="list-style-type: none">■ Pain-guided progression — radiocarpitate joint requires time to adapt■ No resisted wrist loading before Week 10	



Rehabilitation Phases (continued)

Phase 3 — Progressive Loading	Weeks 10–18
<p>Goals:</p> <ul style="list-style-type: none"> • Functional wrist ROM (expected: 40–70° arc flexion/extension) • Progressive grip and wrist strengthening • Functional ADL reintegration 	<p>Exercises & Interventions:</p> <ul style="list-style-type: none"> • Wean from splint (use for heavy tasks) • Theraband wrist flexion/extension (light) • Progressive grip and pinch resistance (dynamometer) • Forearm supination/pronation resisted exercises • Functional tasks: cooking, writing, driving • Occupational therapy for adaptation strategies • Work hardening from Week 14
<p>Precautions:</p> <ul style="list-style-type: none"> ■ Expect ~60–70% of normal ROM — counsel patient on realistic outcomes ■ Avoid heavy axial loading before 16 weeks 	
Phase 4 — Return to Function	Weeks 18–26
<p>Goals:</p> <ul style="list-style-type: none"> • Functional grip and ROM for ADLs and light-moderate work • Long-term wrist management • Sport/work reintegration 	<p>Exercises & Interventions:</p> <ul style="list-style-type: none"> • Progressive resistance training (1–3 kg) • Sport-specific activities (golf — adapted swing, cycling) • Manual work adaptation with OT support • Wrist protection splint for heavy activities long-term • Patient education: radiocapitate contact — avoid end-range loading
<p>Precautions:</p> <ul style="list-style-type: none"> ■ Heavy manual work: surgeon clearance at 6 months ■ Conversion to fusion is an option if radiocapitate joint fails 	

Clinical Notes

- Capitulate chondromalacia intraoperatively: consider fusion over PRC
- Expected grip strength: 75–85% of contralateral at 12 months
- PRC preserves ~60% of normal ROM; patient counselling pre-operatively essential

References

1. Cohen MS, Kozin SH. Degenerative arthritis of the wrist: proximal row carpectomy versus scaphoid excision and four-corner arthrodesis. J Hand Surg Am. 2001;26(1):94-104.
2. Lumsden BC et al. Proximal row carpectomy: a minimum 2-year follow-up study comparing adults younger and older than 35 years. J Hand Surg Am. 2008;33(7):1196-1201.
3. Wall LB et al. Proximal row carpectomy outcomes: a minimum of 20 years follow-up. J Hand Surg Am. 2013;38(8):1498-1504.
4. Croog AS, Stern PJ. Proximal row carpectomy for advanced Kienbock's disease: average 10-year follow-up. J Hand Surg Am. 2008;33(7):1090-1096.
5. Richou J et al. Long-term results of proximal row carpectomy. Chir Main. 2010;29(6):377-383.
6. Weiss ND et al. Position of the wrist associated with the lowest carpal-tunnel pressure. J Bone Joint Surg Am. 1995;77(11):1695-1699.

This rehabilitation protocol is intended as a general guide for qualified physiotherapists and healthcare professionals. It should be adapted to individual patient presentation, surgical findings, tissue quality, and progress. All progression decisions should be made in consultation with the treating surgeon.