CQ HAND + UPPER LIMB
SPECIALIST ORTHOPAEDIC SURGEON

REHABILITATION PROTOCOL

Dupuytren's Release — Rehabilitation Protocol

This protocol guides your recovery after surgical release of Dupuytren's contracture (fasciectomy) with Dr Kieran Hirpara at Mater Private Hospital Rockhampton. The two pillars of a good result are the **splint**, which holds the freed fingers straight while everything heals, and the **exercise program**, which keeps them moving. Bring this page or its PDF to your hand therapist so your rehabilitation stays coordinated.

If you have any concerns about your wound after surgery, get in touch with the rooms. It is often helpful to take a photo of the wound and email it for review.

What to expect

Surgery for Dupuytren's disease removes the diseased cords of tissue that were pulling your fingers into the palm, restoring the ability to straighten them. The condition itself is explained on the Dupuytren's disease page; there is no permanent cure, and the goal of surgery is to excise the diseased tissue and restore finger extension.

You will usually be referred to a hand therapist **2–3 days after surgery**. The therapist will make you a custom plastic splint that holds the operated fingers in an extended (straight) position, and will start you on the gentle exercise program below. The splint and the exercises work together: the splint defends the straightness the surgery won, and the exercises keep the fingers bending so they don't stiffen.

Keep the wound clean and dry until your sutures are removed. Once the sutures are out you can get the skin wet, but avoid soaking or submerging the hand in water for another week. The practice's wound care page covers dressings, signs of infection and scar care in detail — scar massage matters after Dupuytren's surgery, and your therapist will guide it once the wound has healed.

Caring for your scar

The scar in the palm is often firm, raised and tender for the first weeks after Dupuytren's surgery before it gradually softens and fades over the following months. Scar massage is a routine part of Australian hand-therapy care: in a national survey of accredited hand therapists, almost all used it after hand surgery — typically starting around suture removal, once the wound has fully healed — to soften the scar, improve how the skin glides over the tissues beneath, and settle scar sensitivity, usually combined with silicone gel or sheeting rather than used on its own [6]. The research evidence behind scar massage is still developing, but it supports its use

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for reducing scar-related discomfort and improving movement [6]. Your therapist will show you the technique and may add a silicone product, often worn at night alongside the splint.

Recovery, work and the long term

Swelling and stiffness are normal in the early weeks and settle as the hand is used; comfort, motion and grip generally keep improving over several months. The straightness gained at surgery is usually well maintained through this period — in a randomised trial of rehabilitation after Dupuytren's release, most operated fingers held or improved their extension over the first three months of hand therapy [2].

Time off work depends on what you do with your hands. In a study of more than 2,500 people treated for Dupuytren's disease, the median return to work after open fasciectomy was about two weeks, and around nine in ten people were back at work within the year; physically demanding jobs took longer [4]. Dr Hirpara will discuss timing for your particular work at review — heavier manual work usually waits until the wound is soundly healed and grip is comfortable.

Because Dupuytren's is a lifelong condition, some tightness can return over the years, and reported recurrence rates vary widely between studies depending on how recurrence is defined. The long-term picture is generally reassuring: in a follow-up of 142 fasciectomies over roughly four years using the modern consensus definition, true recurrence of contracture occurred in around 3–4% of hands, although about a third kept some residual curvature — usually mild and well short of the contracture corrected at surgery [5]. The splint, scar care and exercise program are all aimed at protecting your result; if a finger does begin to tighten again at any point, let the rooms know.

Your splint

- **First week or so:** wear the splint **day and night**, removing it only for your exercises (and washing, once permitted).
- **After the first week:** most people move to **night-only** splint wear, and can begin using the hand for light activity during the day.
- **Night splinting continues for about 3 months** — and in some cases up to 6 months — to protect against the fingers drifting back toward the palm while the tissues mature.
- Your hand therapist and Dr Hirpara will advise you specifically about your splint-wear schedule and activity — the timings above are the usual pattern, not a fixed rule.

You must not drive while your hand is in the splint. Once you move to night-only wear, daytime driving can resume as comfort and a safe grip on the wheel allow.

For your physiotherapist / hand therapist:

Management

- Referral 2–3 days post-operatively for fabrication of a thermoplastic extension splint

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- Splint regime: day and night for approximately the first week (off for exercises), then night-only with light functional day use; night splinting continued for approximately 3 months (up to 6 months where needed), per surgeon/therapist review
- Home exercise program as per the cards below: active extension, blocked DIP flexion, DIP/PIP flexion over a pen, composite flexion, wrist tenodesis
- Wound care per the practice's wound care guidance; scar management once healed
- Repetitions and daily frequency set by the treating therapist

Precautions

- Keep the wound clean and dry until suture removal; no soaking/submersion for a further week after
- Splint compliance is central to maintaining the extension gained at surgery
- No driving while the hand is in the splint

These are the exercises from your handout, started with your hand therapist and continued at home.

Your exercises

Active extension

With your wrist straight, straighten and spread your fingers as far as you can. You may assist gently with your other hand. Relax and repeat.

As prescribed by your hand therapist

Active DIP flexion

Support the finger just below the crease of the end (DIP) joint with your other hand. Bend the end joint firmly, then relax.

As prescribed by your hand therapist

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Active DIP/PIP flexion

Place a pen across the base of your fingers. Curl your fingers around the pen so that both finger joints (the middle and end joints) bend, then relax.

As prescribed by your hand therapist

Composite flexion

Gently make a loose fist, then relax and let the fingers straighten.

As prescribed by your hand therapist

Wrist tenodesis

Resting on your elbow with your fingers relaxed, bend your wrist forwards and then backwards, letting the fingers follow naturally.

As prescribed by your hand therapist

After your protocol

This protocol was written in association with Ruby Doolan, Accredited Hand Therapist, Extend Rehabilitation. It works alongside the practice's general recovery advice — see managing post-operative pain, wound care and hand therapy basics. For the operation itself, see Dupuytren's fasciectomy.

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The recovery expectations, return-to-work figures and scar-care guidance above are drawn from published trials, reviews and surveys of rehabilitation after Dupuytren's surgery, including randomised trials and a systematic review of splinting and hand therapy after fasciectomy [1–3]. The splint regime and exercise program are the practice's own, agreed between Dr Hirpara and your hand therapist, and your splint-wear schedule is individualised at your reviews.

REFERENCES

1. Jerosch-Herold C, Shepstone L, Chojnowski AJ, Larson D, Barrett E, Vaughan SP. Night-time splinting after fasciectomy or dermo-fasciectomy for Dupuytren's contracture: a pragmatic, multi-centre, randomised controlled trial. BMC Musculoskeletal Disorders. 2011;12:136.
2. Collis J, Collocott S, Hing W, Kelly E. The effect of night extension orthoses following surgical release of Dupuytren contracture: a single-center, randomized, controlled trial. Journal of Hand Surgery (American). 2013;38(7):1285–1294.e2.
3. Karam M, Kahlar N, Abul A, Rahman S, Pinder R. Comparison of hand therapy with or without splinting postfasciectomy for Dupuytren's contracture: systematic review and meta-analysis. Journal of Hand and Microsurgery. 2022;14(4):308–314.
4. Blake SN, Poelstra R, Andrinopoulou ER, et al. Return to work and associated costs after treatment for Dupuytren's disease. Plastic and Reconstructive Surgery. 2021;148(3):580–590.
5. Radhamony NG, Nair RR, Sreenivasan S, et al. Residual deformity versus recurrence following Dupuytren's palmar fasciectomy — a long-term follow-up of 142 cases. Annals of Medicine and Surgery. 2022;73:103224.
6. Scott HC, Robinson LS, Brown T. Scar massage as an intervention for post-surgical scars: a practice survey of Australian hand therapists. Hand Therapy. 2024;29(1):21–29.

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