

From Surgery back to Strength

Hand surgery is often viewed as the solution to pain, stiffness, or injury, but the operation is only the beginning. The real work—and the real gains—happen during rehabilitation. Post hand surgery recovery is a critical phase where tissues heal, strength returns, and function is restored. Without a dedicated approach to hand therapy and physiotherapy, even the most technically perfect surgery can result in lingering stiffness, weakness, or loss of motion or ongoing pain. Understanding the recovery process, setting realistic expectations, and actively participating in rehabilitation are essential for the best possible outcome.

What to Expect After Surgery – Dressings, Swelling, and Movement Restrictions

After surgery, the hand is usually covered with bulky dressings or a splint to protect the surgical site and minimise swelling. Here's what to expect and how to manage this phase:

- **Dressings:** Keep the dressing clean and dry. If it becomes wet or soiled, contact the surgical team for advice. Avoid removing or adjusting the dressing unless instructed. The bandaging or splint is there to protect and support your hand and sometimes to restrict movement to ensure that the tissues can heal in the correct position.
- **Swelling:** Swelling is normal and can last for several weeks. Elevate the hand above heart level as much as possible, especially in the first 72 hours. Use pillows or a sling when sitting or sleeping.
- **Movement Restrictions:** Follow all instructions about which movements are allowed. Some surgeries require strict immobilisation, while others encourage gentle finger movement to prevent stiffness. Generally speaking, it is beneficial to move the parts that aren't contained in the dressings and this may include your shoulder, elbow, wrist and any uninvolved fingers. Joints which are not moved can stiffen up.
- **Pain Management:** Take prescribed pain medication as directed. Over-the-counter options like paracetamol or ibuprofen are often sufficient, but always check with your team that any additional pain killers will not interact with medicines that you are already taking.
- **Warning Signs:** Watch for signs of infection (increased redness, pain, warmth, pus, or fever), excessive swelling, or numbness. Report these to the surgical team promptly.

Practical Tips:

- 🕒 Set reminders to keep the hand elevated.
- 🍲 Prepare easy-to-eat meals and arrange help for daily tasks.
- 🚿 Use a plastic bag or waterproof cover to protect the dressing during showers.

The Role of Hand Therapy – Exercises, Splints, Scar Management

After most operations, formal hand therapy is not needed but self directed exercises and scar management will get you back to full function. A certified hand therapist or physiotherapist can design

a program tailored to the specific surgery and individual needs for more complex recoveries.

- Exercises: Early exercises may include gentle finger bends, tendon glides, or nerve gliding movements. As healing progresses, strengthening and dexterity exercises are added. Consistency is key—perform exercises as prescribed, several times a day. Little and often is best, and some swelling is common after performing activities or exercises.
- Splints: Custom splints may be used to protect healing structures, prevent contractures, or encourage proper alignment. Wear splints exactly as instructed, and bring them to every therapy session for adjustments.
- Scar Management: Once the incision is healed, scar massage with a non-scented lotion or vitamin E oil can soften scar tissue and reduce sensitivity. Silicone gel, sheets or pads may be recommended to flatten and smooth scars. (See my specific scar management information sheet!)
- Desensitization: For sensitive scars or nerve injuries, try gentle tapping, rubbing with different textures, or immersing the hand in a bowl of dry rice or beans. Vibration from the back of a child's electric toothbrush can help to desensitize tissues.

Practical Tips:

- 🏠 Set up a dedicated space at home for exercises.
- ⌚ Use a timer or phone alarm to remind about exercise sessions.
- 📈 Keep a therapy log to track progress and challenges.
- 📺 Ask for written or video instructions for home exercises - you can find this on my website.

Typical Recovery Timelines – Carpal Tunnel vs Dupuytren's vs Thumb base surgery

Recovery varies by procedure, but understanding general timelines helps set expectations:

Carpal Tunnel / Trigger Finger Release:

- Light use (typing, eating) often resumes within 1–2 weeks.
- Driving and heavier tasks may take 3–4 weeks.
- Full grip strength can take 2–3 months to return.

Dupuytren's Contracture Release:

- Splinting and intensive therapy may be needed for people who have had severe contractures.
- Scars are always thick and hard for at least 6 weeks and gradually thin and flatten.
- Swelling and stiffness may persist for several months.
- Night splinting may be recommended for up to 6 months.
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Thumb base surgery:

- Immobilisation (cast or splint) for 2-4 weeks.
- Gradual increase in movement and strength over 2–4 months.

- Full return to sports or heavy labor may take 4–6 months. It is usually quicker for thumb joint replacement than trapeziectomy

Practical Tips:

- 📅 Mark milestones on a calendar to visualise progress.
- 🎉 Celebrate small improvements, like making a fist or holding a cup.
- 🗣️ Communicate with the therapy team about setbacks or concerns.

Managing Stiffness and Swelling – Tips to Stay on Track

Stiffness and swelling are common obstacles, but proactive management can make a big difference:

- Elevation: Keep the hand elevated above heart level as much as possible, especially after exercise or activity.
- Cold Therapy: Apply ice packs (wrapped in a towel) for 10–15 minutes, several times a day, to reduce swelling. A small inexpensive forehead cool pack kept in the fridge between uses is ideal as it can contour to the area you need to apply it to.
- Compression: Use compression gloves or wraps if recommended by the therapist.
- Active Movement: Move unaffected joints (shoulder, elbow) to maintain circulation and prevent stiffness.
- Massage: Gentle massage of the hand and forearm can help move fluid and reduce swelling and will stimulate circulation.
- Hydration and Diet: Drink plenty of water and eat a balanced diet rich in protein and vitamins to support healing.

Practical Tips:

- 🧼 Perform hand exercises after a warm shower when tissues are more pliable.
- 🎊 Use a stress ball or therapy putty for gentle squeezing exercises (if approved).
- 💍 Avoid rings or tight jewellery until swelling has fully resolved.

Returning to Work and Hobbies – When It's Safe to Grip, Lift, or Type Again

Returning to normal activities is a major milestone, but timing is crucial to avoid setbacks:

- Light Activities: Typing, writing, or using a phone may be possible within 1–3 weeks, depending on the surgery.
- Driving: Resume only when able to grip the steering wheel firmly and react quickly—usually 2–4 weeks post-op.
- Manual Labour or Sports: Heavy lifting, gripping, or impact activities should wait until cleared by the surgeon or therapist, often 2–6 months after surgery.
- Hobbies: Gradually reintroduce activities like knitting, gardening, or playing instruments, starting with short sessions and increasing as tolerated.

Practical Tips:

- 🛠️ Use adaptive tools (jar openers, ergonomic pens) to reduce strain.
- 🕒 Take frequent breaks and stretch the hand during repetitive tasks.
- 🧤 Wear protective gloves for gardening or manual work.
- 🧑‍💻 Workforce modifications or phased return with your employer and healthcare team.
- 📝 The surgical team can issue a “fit note” to give instructions about time off work, modified duties or phased return to work.

Improving Grip Strength After Surgery

Why Grip Strength Matters

Grip strength is essential for daily activities such as holding utensils, opening jars, carrying bags, and writing. After surgery, it is common to experience weakness, stiffness, or reduced coordination in the hand and forearm. With consistent exercises and the right tools, grip strength can be safely improved over time.

Practical Steps to Improve Grip Strength

1. Always follow the rehabilitation plan provided by the surgical team. Begin exercises only when cleared to do so.
2. Warm Up the Hand - Use a warm compress or soak the hand in warm water for 5–10 minutes before exercising to improve flexibility and reduce stiffness.
3. Start with Gentle Movements - Begin with simple range-of-motion exercises such as opening and closing the hand, spreading the fingers apart, and making a gentle fist.
4. Progress Gradually - Movement first, strength later. Increase resistance and repetitions slowly to avoid strain. Aim for short, frequent sessions rather than long, intense workouts.
5. Incorporate Daily Activities - Practice gripping light household objects such as a towel, sponge, clothes peg or soft ball to integrate strength training into daily routines.
6. Stretch and Cool Down - After exercises, gently stretch the fingers and wrist to maintain flexibility and reduce soreness.

Recommended Exercise Devices

These devices can be purchased online or at most medical supply or fitness stores:

I have used them and found them to work well.

Hand therapy putty

- Soft, mouldable putty available in different resistance levels. It helps strengthen fingers, improve dexterity, and build overall grip strength. This link will take you to the amazon page where it can be purchased.
- 🌐 JFA Medical Therapy Exercise Putty 5 ...



Handmaster Plus Exerciser

- Hand Grip Strengtheners
- A device with adjustable resistance. It targets the forearm and hand muscles, allowing progressive strengthening. There are three grades of difficulty soft, medium and hard. The one pictured here is the soft one. If you are female I would recommend starting with this one, and if male start with the medium or hard one if you usually have very strong grip. This link will take you to an amazon page to view / buy if you like the look of it.
- [🌐 JFA Medical Therapy Exercise Putty 5 ...](#)



Textured hand Exerciser

- Hand grip strengthener. This has two items which also have a textured surface which provides good sensory input to the hand and some massaging effect when you squeeze which can help with scar tissue.
- This link will take you to the page on amazon where it can be viewed or purchased
- [🌐 2 Piece Hand Therapy Stress Balls for ...](#)



Clothes pegs

Clothes pegs are a good way to build up your pinch strength. Most people have some around the house! You can wrap an elastic band around the opening end to increase resistance.

Safety Tips

- Stop exercising if sharp pain, swelling, or unusual discomfort occurs.
- Perform exercises in a seated position with the arm supported to reduce strain.
- Consistency is more important than intensity—regular practice leads to gradual improvement.

When to Seek Help

Contact a healthcare provider if there is persistent pain, numbness, or difficulty performing exercises. A physiotherapist or occupational therapist can provide tailored guidance and monitor progress.

Conclusion: Healing Is Teamwork Between Surgeon and Patient

Successful hand rehabilitation is a shared effort, but also a delicate balance. The surgeon repairs, but the patient's commitment to physiotherapy, hand therapy, and scar management drives the final outcome. Healing is not always linear—there may be plateaus or setbacks—but persistence pays off. Open communication, realistic expectations, and daily effort transform surgical repair into lasting strength and function. With teamwork and dedication, the journey from surgery to strength is not only possible, but achievable for everyone.