

Post-operative rehabilitation protocol

Scaphoid fracture fixation

Screw fixation of the scaphoid, a small bone at the thumb side of the wrist. For patients, hand therapists, and GPs.

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The plan at a glance

The scaphoid has a poor blood supply and heals slowly. The screw holds it still. Movement starts early. Heavy loading and contact sport wait until a scan shows the bone has healed.

	Phase 1 Weeks 0 to 2	Phase 2 Weeks 2 to 6	Phase 3 Weeks 6 to 12	Phase 4 After 12 weeks
Splint	Plaster backslab and bandage, full time	Removable wrist and thumb splint, off for exercises	Wean off as healing is confirmed	None
Movement	Fingers, elbow, and shoulder. Wrist rests	Gentle active wrist and thumb movement	Full range, with stretches	Full range
Load	Nothing in the hand	A cup of tea	Up to 2 kg, then strengthening as healing allows	Unrestricted once a scan confirms union
Review	Wound check and X-ray at 2 weeks	Clinic and X-ray at 6 weeks	CT scan at 8 to 12 weeks	Discharge when united

Darker shading means tighter restriction. Times are guides. Your surgeon's instructions take precedence where they differ.

Seek advice urgently if

- The wound becomes red, hot, or swollen, or it leaks or opens.
- You have a fever or feel unwell.
- Pain at the thumb side of the wrist returns or increases, especially after a fall or a heavy lift.
- New numbness develops over the back of the thumb or the hand.
- The dressing, splint, or cast feels too tight, or the fingers become cold, pale, blue, or very swollen.

Call 999 or go to the Emergency Department for shortness of breath or chest pain.

For anything else on this list, contact your surgical team the same day. Out of hours, call NHS 111.

Phase 1

Protect: weeks 0 to 2

Aims: control swelling, keep the fingers moving, protect the wound.

Do

- Keep the hand raised above the heart for the first 48 to 72 hours.
- Make a full fist and straighten the fingers fully, ten times every hour.
- Move the tip of the thumb if it is free of the plaster.
- Move the elbow and shoulder fully.
- Keep the backslab dry and in place until the two-week visit.
- Take pain relief regularly as prescribed.

Avoid

- Lifting or carrying with the operated hand.
- Getting the plaster wet.
- Pushing up from a chair with the hand.
- Driving.

Expected in this phase

Swelling and bruising at the base of the thumb are normal. The wound is small, and the stitches are removed or trimmed at two weeks.

Phase 2

Move: weeks 2 to 6

Aims: regain wrist and thumb movement without loading the bone.

Do

- Wear the removable splint. Take it off to exercise and wash.
- Bend the wrist forwards and back, and side to side, within comfort.
- Move the thumb across the palm and out to the side.
- Turn the palm up and down with the elbow at your side.
- Use the hand for light tasks: eating, typing, dressing.
- Massage the scar once the wound has fully healed.

Avoid

- Lifting anything heavier than a cup of tea.
- Gripping hard or pinching with force.
- Body weight through the hand.
- Any activity with a risk of falling.
- Smoking. It greatly raises the risk of the bone not healing.

Move on to Phase 3 when

The six-week X-ray shows the screw is unchanged, and the bone is not tender.

Phase 3

Load in stages: weeks 6 to 12

Aims: full movement, early strength, confirmation of healing.

Do

- Wean out of the splint as your surgeon advises.
- Stretch the wrist to the end of range.
- Start gentle grip work with soft putty.
- Add light wrist strengthening once healing is progressing on X-ray.
- Attend the CT scan. It shows healing far better than X-ray.

Avoid

- Lifting more than 2 kg until healing is confirmed.
- Body weight through the hand: press-ups, handstands, cycling.
- Contact sport and activities with a risk of falling.
- Heavy manual work.

Move on to Phase 4 when

A CT scan confirms the bone has united and the wrist is not tender.

Phase 4

Return: after 12 weeks

Aims: full strength, full work, full sport.

- Build grip and wrist strength to match the other side.
- Take weight through the hand in stages: table lean, wall press, then floor work.
- Return to contact sport and heavy manual work.

The screw

The screw sits inside the bone and usually stays for life. If the scan shows the bone has not healed, further surgery with a bone graft may be advised.

Return to activity

Typical times from surgery. Each depends on comfort, movement, and healing.

Activity	From	Condition
Desk work	1 to 2 weeks	One-handed at first
Running	2 to 4 weeks	In the splint, on safe ground
Driving	4 to 6 weeks	Out of the rigid splint, able to grip the wheel
Swimming	6 weeks	Wound healed, gentle strokes
Light manual work	6 to 8 weeks	Within the 2 kg limit
Gym, upper limb loading	12 weeks	Union on CT
Golf, racket sports	12 weeks	Union on CT
Cycling	12 weeks	Union on CT
Heavy manual work	12 weeks	Union on CT
Contact sport	12 weeks	Union on CT. Earlier only with your surgeon's agreement.

When to slow the protocol

Some patients need more time. Your surgeon will tell you if any of these apply.

- **Fixation of a fracture that had failed to heal (non-union), with bone graft.** A cast is worn for six to eight weeks, sometimes twelve. Movement starts only when a scan shows healing.
- **Fracture at the end nearest the forearm (proximal pole).** The blood supply is at its poorest here. A cast is worn for six weeks and each phase runs later.
- **Smoking.** Stop completely, including vaping nicotine. It is the largest avoidable cause of failure to heal.
- **Bone graft taken from the hip or the forearm.** The donor site is sore for two to three weeks.

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This protocol is general guidance for uncomplicated screw fixation of a scaphoid fracture. It is not a substitute for individual medical advice. Instructions from your own surgeon and therapist take precedence.

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