

Post-operative rehabilitation protocol

Distal radius fracture fixation (ORIF)

Plate fixation of a broken wrist. For patients, hand therapists, and GPs.

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The plan at a glance

The plate holds the bone while it heals. The fingers move from day one. The wrist moves from two weeks. Loading waits for the bone.

	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 splint, off for exercises	None	None
Movement	Fingers, thumb, elbow, and shoulder. Wrist rests	Active wrist bending and forearm turning	Full range, with stretches	Full range
Load	Nothing in the hand	A cup of tea, building to 1 kg	Progressive strengthening, up to 5 kg	Unrestricted once the bone has united
Review	Wound check and X-ray at 2 weeks	Clinic and X-ray at 6 weeks	Clinic at 12 weeks if needed	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 is severe or burning, with swelling, stiffness, and colour or sweating changes in the hand.
- You cannot bend or straighten the tip of the thumb.
- New numbness or tingling develops in the thumb and fingers.
- 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 and shoulder 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.
- Touch the thumb to each fingertip and to the base of the little finger.
- Move the elbow and shoulder fully. Lift the arm above the head several times a day.
- 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.
- Letting the hand hang down for long periods.
- Getting the plaster wet.
- Pushing up from a chair with the hand.
- Driving.

Expected in this phase

The fingers swell and bruise. Swelling is the main cause of a stiff hand. Elevation and a full fist every hour are the treatment.

Phase 2

Move: weeks 2 to 6

Aims: regain wrist and forearm movement, return to light daily tasks.

Do

- Wear the removable splint for protection. Take it off to exercise, wash, and rest safely at home.
- Bend the wrist forwards and back, and side to side.
- Turn the palm up and down with the elbow tucked into your side.
- Use the hand for light tasks: eating, typing, dressing.
- Massage the scar once the wound has fully healed.
- Wean out of the splint from week four as comfort allows.

Avoid

- Lifting more than 1 kg.
- Gripping hard or twisting against resistance: jars, taps, door handles.
- Body weight through the hand.
- Any activity with a risk of falling.
- Forcing movement into pain.

Move on to Phase 3 when

The six-week X-ray shows the fixation is unchanged and the bone is healing, and the fracture site is not tender.

Phase 3

Strengthen: weeks 6 to 12

Aims: full movement, grip strength, normal daily use.

Do

- Stop using the splint.
- Stretch the wrist and forearm to the end of range. Use the other hand to help.
- Build grip with putty, then a gripper.
- Strengthen the wrist with light weights, then bands.
- Take weight through the hand in stages: table lean, wall press, then floor work from week ten.

Avoid

- Lifting more than 5 kg.
- Contact sport and activities with a risk of falling.
- Heavy manual work.

Move on to Phase 4 when

The bone has united, movement is close to the other side, and grip is comfortable.

Phase 4

Return: after 12 weeks

Aims: full work, full sport, no restrictions.

- Progress to heavy lifting and full weight through the hand.
- Return to contact sport and heavy manual work.
- Keep stretching. Movement and grip improve for up to a year.

The plate

The plate usually stays in for life. It is removed if it irritates the tendons. Tell your surgeon if the thumb or fingers catch, rub, or become weak.

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
Driving	4 to 6 weeks	Out of the splint, able to grip and turn the wheel. Tell your insurer.
Running	6 weeks	Satisfactory six-week X-ray
Swimming	6 weeks	Wound healed, out of the splint
Light manual work	6 to 8 weeks	Within the 5 kg limit
Light gym resistance	6 weeks	Satisfactory six-week X-ray
Golf, racket sports	10 to 12 weeks	Good grip and movement
Cycling	12 weeks	Union on X-ray
Heavy manual work	12 weeks	Union on X-ray
Contact sport	12 weeks	Union on X-ray

When to slow the protocol

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

- **Fragmented fracture into the joint, or weak bone.** The splint stays on for the full six weeks. Loading starts later, guided by X-ray.
- **Injury to the joint at the little-finger side of the wrist.** Forearm turning is blocked in a splint for four to six weeks.
- **Fixation with wires.** A cast is worn until the wires come out at four to six weeks. Wrist movement starts after that.
- **Smoking and diabetes.** Both slow healing. Stop smoking and vaping nicotine. Keep blood sugar well controlled.
- **Bone health.** If you are over 50 and the fracture followed a simple fall, ask your GP about a bone health assessment.

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

Version 1.0, October 2026. Review due October 2028.