PATIENT INFORMATION

Activity Modification for Arm Injuries

How to keep moving — without making things worse. A surgeon's guide to managing the load on an injured shoulder, elbow, wrist or hand.

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Why Activity Modification Matters

If you have injured a shoulder, elbow, wrist or hand, one of the most important things you can do — often more important than any tablet, brace, or injection — is to **change how you use it for a while**. Not stop using it. Not push through. Modify it.

Activity modification is the deliberate, temporary change in how you do something so that an injured tissue can recover while you stay active, working and engaged with life. Done well, it shortens recovery, prevents re-injury, and keeps you out of the operating theatre. Done badly — by either over-resting or pushing through — it prolongs symptoms and entrenches the problem.

This guide is the practical playbook I use with my own patients. It explains why modification works, how to find the right level of activity for your injury, what to continue, what to change, what to stop, and how to progress safely back to full function.

> **The principle in one sentence**
>
> *Reduce the load enough that the tissue can heal — but keep enough motion and load that it does not stiffen, weaken, or forget how to work.*

The Biology Behind the Principle

Tendons, muscles, ligaments and bones are not passive structures. They live, breathe, adapt and remodel based on the loads you place on them. This is the foundation of all sensible rehabilitation.

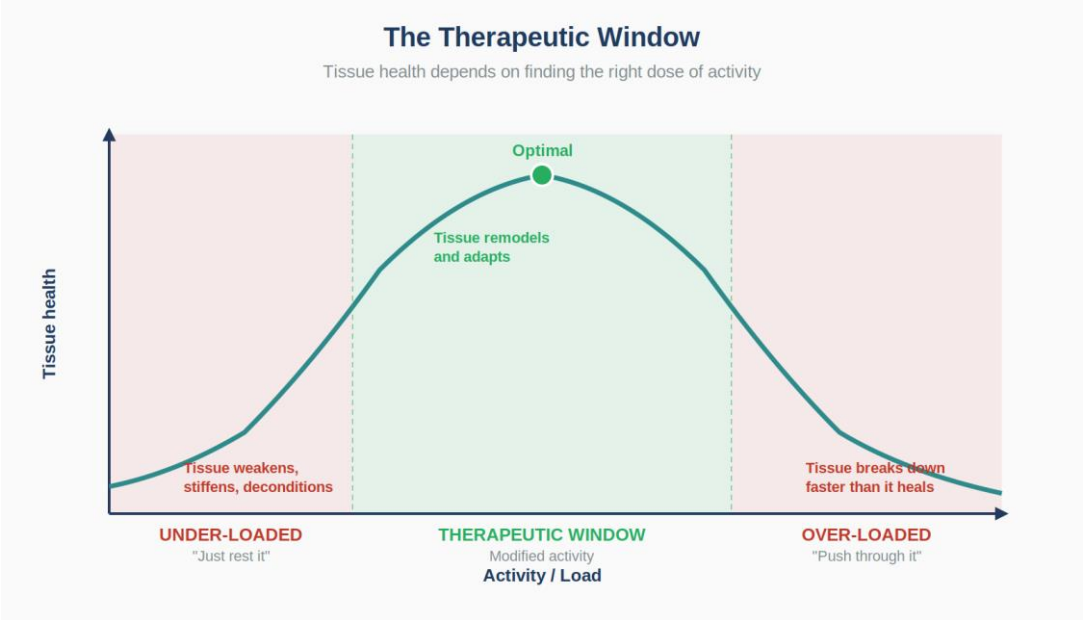

Figure 1 — The therapeutic window. Tissues need load to stay healthy, but too much load causes breakdown. The middle zone is where healing happens.

Tissues need load to stay healthy

A tendon completely rested for six weeks loses meaningful strength and stiffness. The collagen fibres disorganise. The blood supply diminishes. When you eventually return to activity, the tendon is weaker than when you started — and far more likely to re-injure. This is why “just rest it” is almost always bad advice.

Tissues also need rest from excessive load

But the same tissue, repeatedly overloaded with no chance to recover, never gets the opportunity to remodel and heal. Microscopic damage accumulates faster than the body can repair it. Inflammation persists. Pain becomes chronic. This is why “push through it” is also bad advice.

The therapeutic window

Between these two extremes is a therapeutic window — enough load to maintain and stimulate healing, not so much that you re-injure. Activity modification is the practice of finding and staying in that window. It is rarely complete rest, and it is never working through pain. It is the intelligent middle path.

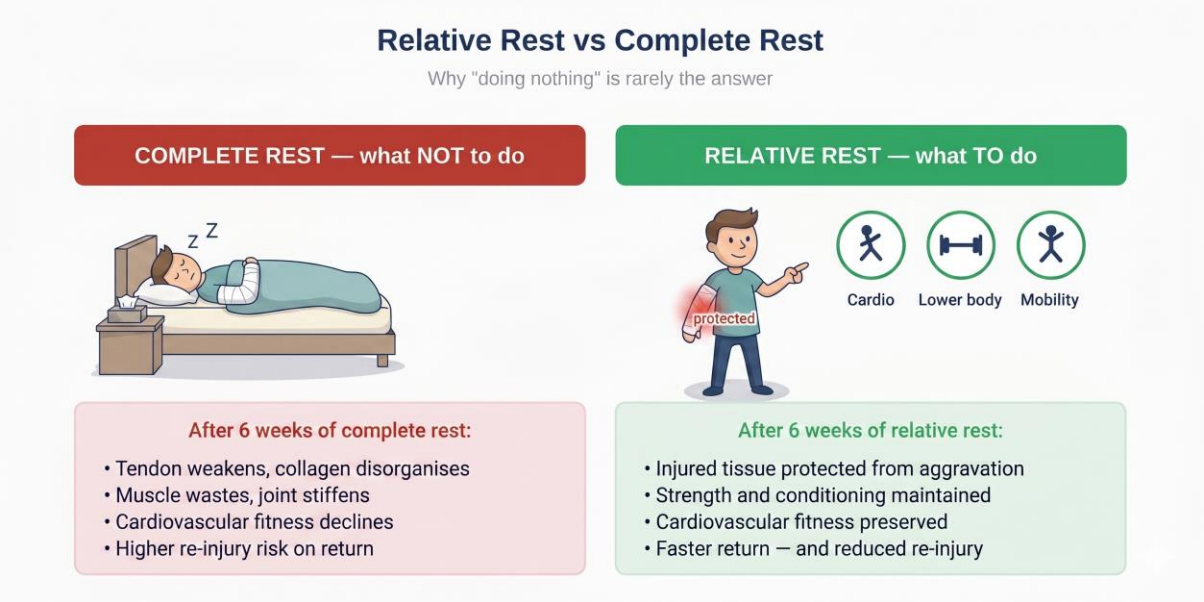

Figure 2 — Relative rest beats complete rest. The injured tissue is protected, but the rest of the body keeps training.

The Three Principles of Smart Modification

1. Identify the aggravating activity

Before you can modify, you have to know what is making things worse. Spend a week paying close attention. The aggravating activity is rarely a single, dramatic event — it is usually a daily, often unconscious habit.

- Which movements reproduce the pain?
- At what time of day are symptoms worst?
- Which tasks leave you aching that evening or the next morning?
- Which positions wake you at night?

A short symptom diary — even just notes on your phone — almost always reveals the pattern. Common culprits: prolonged mouse use, carrying a child on one side, gripping a steering wheel, sleeping on the affected side, a particular gym exercise, or a repetitive work task.

2. Reduce the dose, not the activity

The most common mistake is to stop the aggravating activity entirely. Almost always, a better approach is to **reduce the dose** — the volume, intensity, frequency or duration — to a level the injured tissue can handle.

A few practical examples:

- If 30 minutes of typing flares your wrist, type for 15 minutes and break for 5 — repeated.
- If lifting 10 kg hurts your elbow, lift 4 kg with the same number of reps.
- If a full tennis match aggravates your shoulder, hit for 20 minutes instead of two hours.
- If carrying a toddler all day inflames your thumb, carry on alternate sides and use a sling.

The principle: keep the pattern of movement, just shrink it. Tissues respond well to small, repeated doses of the load they will eventually need to tolerate fully.

3. Substitute, don't eliminate

When something genuinely cannot be modified down to a tolerable level, substitute it. The goal is to keep the body conditioned and the rest of the joint moving — even while one specific motion is rested.

If this aggravates	Substitute with	Why it works
Bench press	Floor press, push-up variations	Limits shoulder extension at the painful range
Heavy biceps curls	Hammer curls, rope curls	Reduces strain on the distal biceps tendon
Running with arm swing	Cycling or rowing on a machine	Cardiovascular fitness without arm impact
Gripping work tools	Padded grips, ergonomic handles	Reduces compressive load on tendons
Carrying heavy bags	Backpack with both straps	Distributes load symmetrically
Overhead reaching	Step-stool, repositioned shelving	Avoids the painful arc

Continue, Modify or Stop?

The simplest decision framework I give patients. For each activity in your week, ask which column it belongs in. The honest answer is rarely “stop everything.”

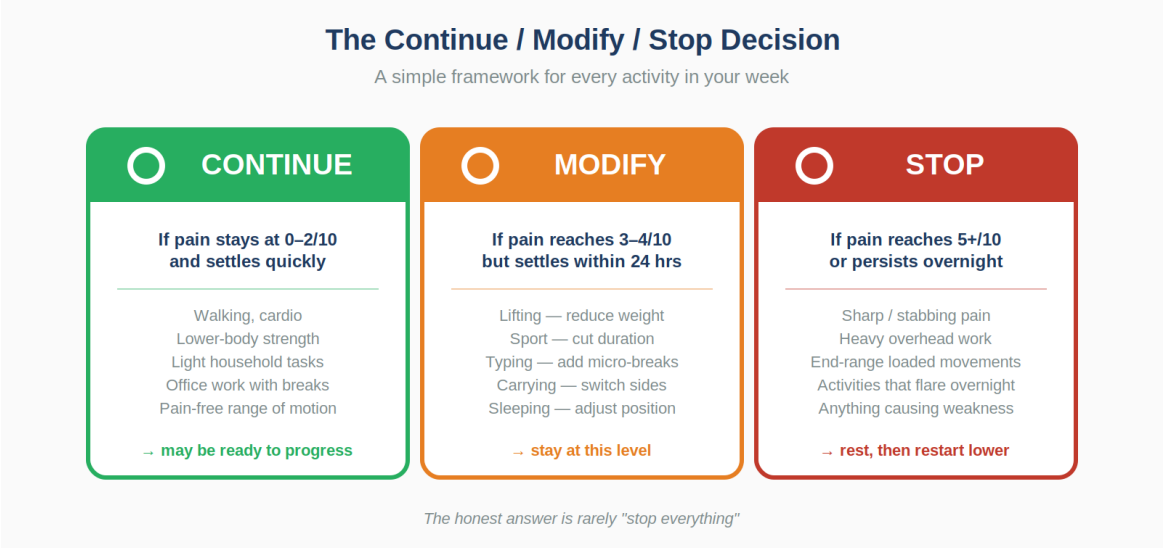

Figure 3 — The Continue / Modify / Stop framework, with examples and the action to take in each zone.

Using Pain as Your Guide

Pain is information. Used well, it tells you exactly when you have moved out of the therapeutic window. Used badly — either ignored or feared — it stops you from making progress.

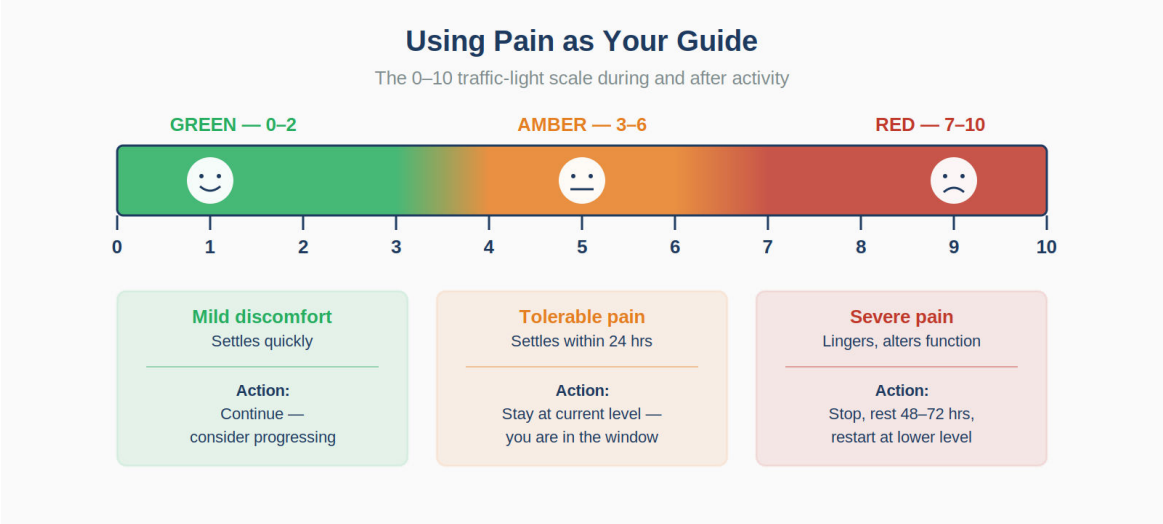

Figure 4 — The 0–10 traffic-light pain scale. Use this to rate your pain during and after activity, then act accordingly.

The traffic-light pain scale

Rate your pain during and after activity on a 0–10 scale. Use this to guide your next session.

Pain level	What it means	What to do
0–2 (green)	Mild discomfort, settles quickly	Continue — you may be able to progress
3–4 (amber)	Noticeable but tolerable, settles within 24 hours	Stay at current level — you are in the window
5–6 (amber/red)	Significant pain, lingers for 24+ hours	Reduce dose by 30–50% next time
7+ (red)	Severe pain, alters function or sleep	Stop, rest 48–72 hours, restart at lower level

The 24-hour rule

Pain during activity is one signal. Pain *the morning after* is the more important one. If you wake up stiffer or sorer than you went to bed, you did too much — even if it felt fine at the time. Adjust the next session down by a third and rebuild from there.

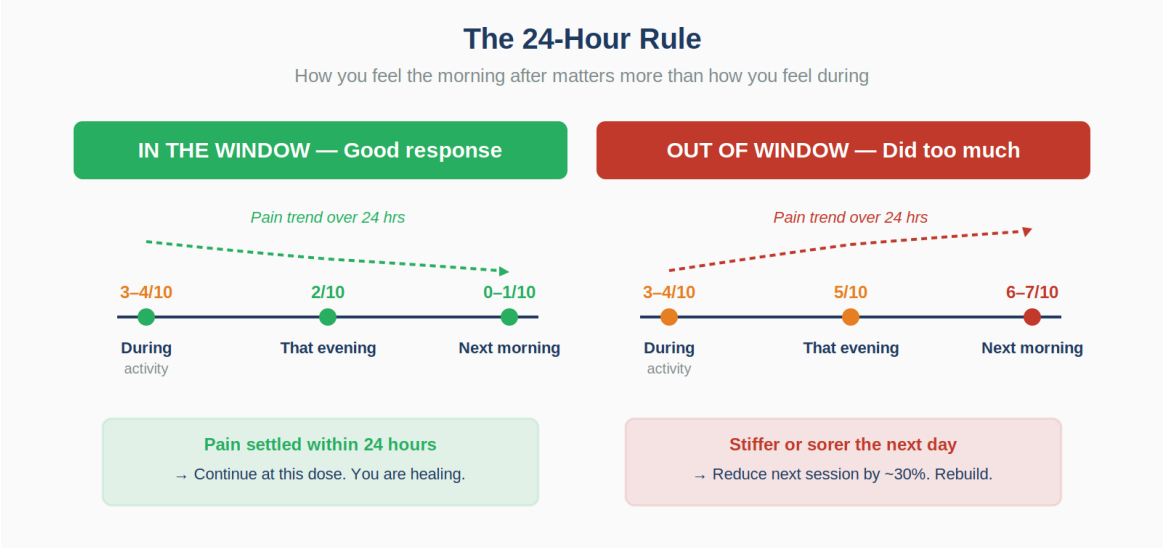

Figure 5 — How the same activity can produce two very different 24-hour responses, telling you whether to hold or scale back.

Pain to respect, pain to work through

There are two kinds of pain in a recovering arm. Learning to tell them apart is one of the most useful skills in rehabilitation.

Pain to respect — stop or reduce

- Sharp, stabbing, electric or shooting pain
- Pain at rest or at night, especially if waking you
- Pain associated with swelling, redness or warmth
- Pain that worsens session-on-session over a week
- Sudden weakness or loss of function

- Pain accompanied by pins, needles or numbness

Pain to work through — within reason

- Dull ache up to 4/10 during loaded exercise
- Discomfort that eases as the tissue warms up
- Stiffness that improves with gentle movement
- Mild residual ache that settles within 24 hours
- Familiar discomfort that stays the same or improves week-on-week

Condition-Specific Modifications

Different injuries need different modifications. Below are the most common upper-limb problems I treat, and the practical changes that make the biggest difference.

Rotator cuff tendinopathy and shoulder impingement

- Avoid sustained overhead work — break it into 5-minute blocks
- Keep the elbows below shoulder height during weight training
- Sleep on the unaffected side, hugging a pillow with the painful arm
- Adjust your driving position so the steering wheel is at the “9 and 3” position, not “10 and 2”
- Substitute lat pulldowns for behind-the-neck exercises
- Replace upright rows with face pulls

Frozen shoulder (adhesive capsulitis)

- Maintain pain-free range — small frequent movements beat occasional forceful stretches
- Avoid sudden grabs or reaches behind the body
- Modify dressing — slide the affected arm in first, out last
- Heat before, ice after, gentle daily mobility work
- Do not push through stretching pain — frozen shoulders worsen with aggressive force

Tennis elbow (lateral epicondylitis)

- Reduce gripping intensity — use ergonomic handles and padded grips
- Lift with the palm facing up rather than down (reduces extensor load)
- Use a counterforce brace or strap during work or sport
- In tennis, check grip size and string tension with a coach — equipment matters as much as technique
- Switch typing to a vertical mouse and split keyboard if work-related
- Substitute heavy gripping exercises for hammer curls and farmer’s walks with thicker handles

Golfer’s elbow (medial epicondylitis)

- Avoid sustained heavy gripping and repetitive wrist flexion
- In golf, address grip pressure and casting from the top with a coach
- Modify pull-day exercises — use neutral-grip or supinated pulls instead of pronated
- Substitute heavy deadlifts with lighter trap-bar variations until symptoms settle

Carpal tunnel syndrome

- Wear a neutral wrist splint at night — this single change resolves many mild cases

- Float the hands while typing — never rest wrists on the desk edge
- Use a vertical or contoured mouse
- Take micro-breaks every 20–30 minutes from sustained gripping or typing
- Avoid prolonged motorbike riding, cycling on drop bars, or vibration tools without padded gloves

De Quervain's tenosynovitis (mother's thumb)

- Lift babies with both hands under the trunk — never with extended thumbs under the armpits
- Use a thumb spica splint during aggravating activities
- Modify phone use — alternate thumbs, use voice dictation
- Substitute pinch grip with whole-hand grip whenever possible
- Wring out cloths with two hands rather than twisting one-handed

Trigger finger / thumb

- Avoid prolonged forceful gripping — particularly tools with hard handles
- Use padded gloves or grip sleeves on tools you cannot avoid
- Consider a night splint to keep the digit straight overnight
- Reduce activities that compress the palm — long cycling rides, heavy gardening with secateurs

Thumb base arthritis (CMC joint)

- Replace pinch grip with whole-hand power grip wherever possible
- Use jar openers, electric tin openers, lever-style door handles
- Avoid wringing out wet cloths or twisting tight lids by hand
- Use a thumb spica brace for flares and prolonged tasks

Post-fracture or post-surgical recovery

Modification after a fracture or operation is more structured and follows the protocol given by your surgical team. The general rule is that loading progresses in phases — protected motion, then active motion, then strengthening, then return to full activity. Do not skip phases. Do not invent new exercises. The most common cause of failed recovery I see is patients who progress too quickly and undo the surgery.

Progressing Back to Full Activity

Activity modification is not a destination. It is a temporary state on the journey back to normal function. The goal is always to return to what you love doing — but to return there with a tissue that has remodelled and adapted, not one that is still vulnerable.

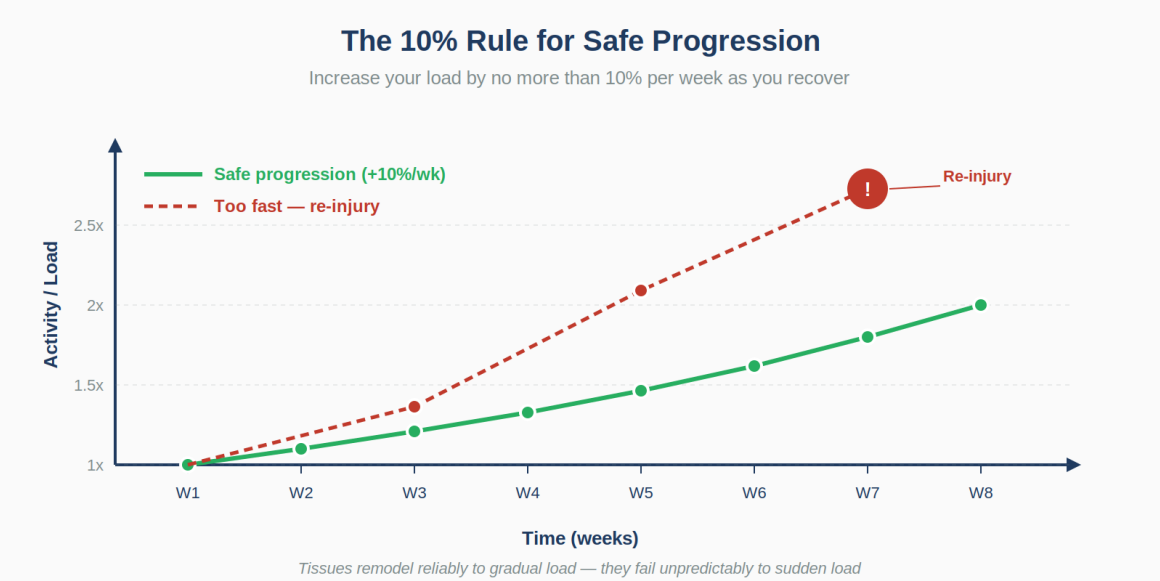

Figure 6 — The 10% rule. Slow, steady progression remodels tissue reliably; rapid progression invites re-injury.

The 10% rule

Once symptoms are settling, increase your load by no more than 10% per week. This applies to weight lifted, distance run, time spent typing, minutes practising an instrument — almost any measurable activity.

If you were comfortably tolerating 20 minutes of mouse work, aim for 22 next week. If you were lifting 4 kg comfortably, try 4.5 kg. Tissues remodel reliably to gradual load — they fail unpredictably to sudden load.

Watch for relapse signals

- Pain that returns at the same level after each session
- Morning stiffness lasting longer than 15–20 minutes
- Sleep disturbed by the affected limb
- New compensatory pain in the neck, opposite shoulder, or lower back
- Plateau in progress for more than two weeks

Any of these mean you have stepped beyond the therapeutic window. Drop back to the last comfortable level and rebuild more gradually.

Returning to sport

1. Pain-free in daily life — no symptoms during normal work and household tasks

2. Full or near-full range of motion — symmetrical compared with the unaffected side
3. Strength restored — at least 90% of the unaffected side, tested progressively
4. Tolerates training-specific drills — controlled, supervised, sport-specific
5. Mental readiness — confidence in the limb, no guarding or compensation

Rushing any of these stages is the most common cause of re-injury. A second injury to the same area heals less reliably than the first. Patience here saves months later.

Common Mistakes I See in Clinic

Doing nothing for weeks, then doing everything in a day

Patients who completely rest a tendon for six weeks and then return to full activity are setting themselves up for a worse flare than they started with. Tissues weaken with disuse. Reintroduce load early and gradually.

Over-relying on splints and braces

Splints are a tool, not a cure. Worn during aggravating activities or at night, they protect. Worn 24 hours a day for months, they cause stiffness and weakness. Most splints have a defined timeframe — usually a few weeks — beyond which they do more harm than good.

Stopping pain medication and assuming it's fixed

Anti-inflammatory medication can mask pain that would otherwise tell you to slow down. Be cautious about resuming full activity simply because the tablet is working — the underlying tissue is still healing.

Asking the wrong question

"When can I get back to normal?" is the question I am asked most often. The better question is: *"What can I do today that gets me closer to normal without setting me back?"* The answer to that question is almost always something — and that something is usually quite a lot.

Ignoring the rest of the body

An injured shoulder does not mean an injured cardiovascular system. Keep the unaffected limbs strong, the legs moving, and aerobic fitness up. Patients who train around their injury recover faster than those who detrain entirely.

When Activity Modification Alone Is Not Enough

Most upper-limb injuries respond well to a combination of activity modification, ergonomic correction, loaded rehabilitation and time. But not all do. Seek specialist review if any of the following apply:

> **Red flags — book a specialist review**

- Symptoms persist beyond 6–8 weeks despite consistent modification
- Night pain that consistently disrupts sleep
- Persistent or worsening weakness or muscle wasting
- Numbness or pins-and-needles that do not settle
- A sudden injury with significant swelling, bruising or deformity
- A clicking, catching or locking sensation that is not improving

These features suggest there may be a structural problem — a tear, an entrapment, an unstable joint — that needs imaging or intervention. Activity modification remains useful in these situations, but it is no longer sufficient on its own.

A Worked Example: From Flare to Full Recovery

To make these principles concrete, here is a representative case I see often — a desk worker in their forties who develops tennis elbow. The four phases below map onto the recovery pathway:

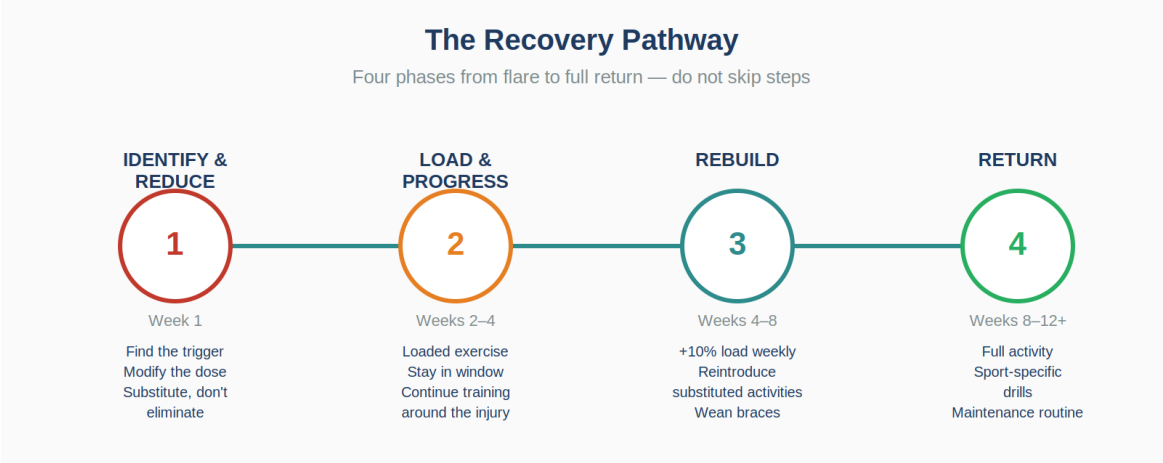

Figure 7 — The four phases of recovery. Each phase has a different goal and a different dose of activity. Skipping phases is the commonest cause of relapse.

Week 1 — Identify and reduce

- Symptom diary identifies the mouse and a heavy gym press as the main triggers
- Mouse swapped for a vertical mouse; micro-breaks every 25 minutes
- Heavy upper-body pressing replaced with lower-body strength work and floor presses
- Counterforce strap worn during the working day
- Nightly stretching of the forearm extensors

Weeks 2–4 — Load and progress

- Loaded eccentric exercises for the wrist extensors begin (slow, heavy, 3 times weekly)
- Pain during exercise rated 3/10 — within the therapeutic window
- Mouse work tolerable up to 30 minutes before micro-break
- Cardio and lower-body training continue uninterrupted

Weeks 4–8 — Rebuild

- Loaded exercises increase weight by 10% weekly
- Light upper-body pressing reintroduced — initially with neutral grip
- Counterforce strap weaned for working hours, retained for sport
- Symptoms during typing and daily tasks now intermittent and mild

Weeks 8–12 — Return

- Full return to gym programme with attention to grip and elbow position
- Tennis reintroduced with a coaching session on grip size and stroke mechanics
- Symptoms resolved at rest and during normal work

- Maintenance routine continues — the tendon now requires ongoing load to stay healthy

What this example illustrates

Activity was never stopped. Cardiovascular fitness, lower body strength and the contralateral arm trained throughout. The injured tissue was given a tolerable, progressively increasing dose of the very load it would eventually need to handle. By week 12, the elbow was stronger and more resilient than before the flare — not despite the work, but because of it.

Frequently Asked Questions

Should I rest completely if it really hurts?

Brief, complete rest (2–3 days) is sometimes appropriate for an acute flare. Beyond that, complete rest is rarely the answer. Even when one specific motion needs to be avoided, the rest of the limb and the rest of the body benefits from continuing movement. The goal is to find what you can do, not to focus on what you cannot.

How do I know if I am modifying enough?

If your pain is no worse the next morning, your modification is probably appropriate. If symptoms continue to flare overnight or progress week-on-week, you have not modified enough. The 24-hour pain response is the most reliable single indicator.

Can I keep going to the gym?

Almost always — but not necessarily doing the same things. Lower-body work, cardio, core, and any pain-free upper-body movements should continue. Substitute the painful exercises rather than skipping the gym altogether. People who keep training around an injury recover faster and with better fitness than those who stop entirely.

What about painkillers and anti-inflammatories?

Short courses of paracetamol or, where appropriate, anti-inflammatory medication can break a pain cycle and allow you to start moving again. They are an adjunct, not a treatment. Always check with your pharmacist or GP if you have other health conditions or take regular medication.

Should I see a physiotherapist or just self-manage?

For a mild or recent flare, self-management with a clear plan often works. For anything more persistent — symptoms beyond 4–6 weeks, recurrent flares, or post-surgical recovery — a physiotherapist is invaluable. They can pinpoint the load tolerance, prescribe progressive exercise, and catch errors in technique you would not spot yourself.

When will I feel completely normal?

Most upper-limb tendinopathies and overuse injuries take 8–12 weeks of consistent management to settle. Some take longer. The timeline is rarely shortened by impatience — and is reliably extended by repeatedly stepping outside the therapeutic window. Trust the process.

Is it normal to feel some pain forever?

Most patients return to fully pain-free function. A few — particularly with chronic tendinopathy or arthritis — settle to a much lower level of intermittent symptoms rather than complete resolution. This is still a successful outcome and far preferable to surgery as a first-line approach.

A Final Word

Activity modification is one of the most powerful tools in upper-limb medicine — and the most underused. It is not glamorous. It does not generate a procedure note. It rarely makes a headline. But for the great majority of arm injuries, intelligently applied modification — combined with loaded rehabilitation, ergonomic correction and patience — does what no injection or operation alone can do: it gives the tissue what it actually needs to heal.

If you are reading this with an injury, the most important thing you can do today is start asking better questions. Not “should I rest?” Not “should I push through?” Instead: ***what dose of activity does my body need today to be a little better tomorrow?*** The answer to that question is your therapeutic window. Stay in it, and most things heal.

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