

Why a Healed Wrist Fracture Still Feels Stiff —and How to Rehab

By PT Ahmad Al Hariri, Physical Therapist

Clinical Scope & Medical Disclaimer

This document is strictly a physical therapy rehabilitation guide designed to address joint stiffness and restore functional mobility. As a physical therapist, I do not provide medical, surgical, or bone-healing advice. Never force movement simply because a cast was removed. Ensure your orthopedic specialist has confirmed your fracture is adequately healed and has explicitly cleared you for active movement before beginning any exercises.



Restoring wrist mobility requires gradual, consistent movement rather than aggressive stretching.

Why the Wrist Becomes Stiff After a Fracture

It is incredibly common for a wrist to feel rigid, weak, or stuck even after the bone itself has successfully healed. This stiffness is typically the result of the joint and surrounding soft tissues spending weeks immobilized in a cast, splint, or surgical dressing.

Several common factors contribute to this temporary loss of motion:

- **Prolonged Immobilization:** Tendons, ligaments, and joint capsules naturally tighten when they are not subjected to their normal daily movements.
- **Joint Swelling and Edema:** Excess fluid collects in the joint space, acting like glue and physically

Initial Mobility Routine for a Stiff Wrist

Once you have received clearance from your medical team, we begin with controlled *active* range-of-motion exercises. The objective is not to aggressively stretch the joint, but to repeatedly expose the wrist to comfortable movement. This allows irritated tissues to gently adapt without causing a flare-up of pain or swelling.



1. Flexion & Extension

Rest your forearm on a table with your hand extending off the edge. Slowly lower your hand downward (flexion) and smoothly raise it upward (extension). Do not bounce.

8–12 Reps • 2–4x Daily



2. Radial & Ulnar Deviation

Support your forearm fully on a table. Move your wrist side-to-side, toward the thumb (radial) and then the pinky (ulnar). Keep the forearm still.

8–12 Reps • 2–4x Daily



3. Forearm Rotation

Keep your elbow tucked securely against your side, bent at 90 degrees. Slowly rotate your palm to face upward, then downward. Pause briefly at your limit.

8–12 Reps • 2–4x Daily



4. Wrist Circles

Once basic straight-plane movements are comfortable, begin making small, controlled circles with your hand. Gradually enlarge the circle over time.

5–10 Reps (Each Way)

Swelling and Soft-Tissue Management

Managing swelling is a critical component of restoring range of motion. Excess fluid restricts movement and increases discomfort. As a physical therapist, I often see patients struggle with stiffness simply because they haven't adequately addressed localized swelling.

- **Elevation:** Whenever you are resting, attempt to keep your hand elevated above the level of your heart. This allows gravity to assist in draining excess fluid back toward the body's center.
- **Active Pumping:** Regularly opening and closing your fingers into a loose fist acts as a natural muscle pump. This simple action helps clear stagnant fluid from the hand and wrist tissues.
- **Scar Management:** If you underwent surgical fixation (such as a plate and screws), wait until the incision is completely closed and your surgeon has given clearance. Once cleared, gentle cross-friction massage over the scar can help prevent tissue adhesions that limit tendon mobility.

Strengthening After Mobility Improves

In physical therapy, we prioritize establishing a foundation of mobility before applying heavy strengthening loads. Once your active range of motion has improved and baseline pain has settled, we can begin to safely rebuild muscular endurance and strength.

- **Isometric Holds:** Begin by pushing the hand against an immovable object (like your opposite hand or a wall) without actually moving the joint. Hold the tension for 5–10 seconds. This activates the muscles safely without stressing the healing bone.
- **Light Resistance:** As you progress, introduce very light resistance bands or small 1–2 pound weights for the same motions practiced in your mobility routine (flexion, extension, rotation).
- **Grip Strengthening:** Immobilization often severely reduces grip strength. Use a soft sponge, a rolled towel, or specialized therapy putty to gently squeeze and rebuild your gripping mechanics.

Functional Wrist Rehabilitation

Rehabilitation isn't just about performing exercises in a clinic; it is ultimately about returning your hand to daily life. Integrate your recovering wrist into normal tasks as soon as it is safe and comfortable to do so. Graded exposure to daily tasks is one of the most effective forms of physical therapy.

- Practice holding lightweight objects, such as a plastic cup or utensils.
- Work on functional rotations, such as turning doorknobs or opening loose jars.
- Gradually return to typing or writing, ensuring you take frequent breaks to stretch and prevent cramping.

Common Mistakes During Wrist Rehabilitation

Avoiding setbacks is just as important as doing your exercises. Keep these clinical guidelines in mind:

- **Pushing into sharp pain:** Stretching should feel like a mild, dull pull or tension. It should never feel like a sharp, stabbing, or electrical pain.
- **Ignoring the rest of the arm:** Because the wrist is protected, people often forget to move their shoulder and elbow, leading to secondary stiffness in those joints.
- **Rushing the timeline:** Tissues need time to adapt. Doing 100 repetitions on your first day of rehab will likely cause a severe inflammatory setback. Pace yourself.

When to Seek Further Assessment

While mild muscular ache and tension are normal parts of physical rehabilitation, certain symptoms require immediate evaluation by your orthopedic physician. Do not hesitate to contact your doctor if you experience a sudden, severe increase in pain or swelling, numbness, tingling, or color changes in your fingers, or a sensation of clicking, catching, or joint instability that was not present previously.