

Wrist Fractures

Diagnosis Explanation:

A **wrist fracture** occurs when one or more of the **bones in the wrist (radius, ulna, or carpal bones)** break due to **trauma, falls, or high-impact injuries**. The most common type is a **distal radius fracture** (Colles' or Smith's fracture), usually caused by a **fall onto an outstretched hand (FOOSH)**.

Types of Wrist Fractures:

- **Distal Radius Fracture** - The most common, affecting the larger forearm bone near the wrist.
- **Scaphoid Fracture** - Involves the small carpal bone in the wrist, often difficult to detect.
- **Ulna Fracture** - May occur alongside a radius fracture.
- **Comminuted Fracture** - Bone is broken into multiple pieces.
- **Intra-Articular Fracture** - The break extends into the joint, increasing arthritis risk.

Symptoms:

- **Severe pain and swelling** around the wrist.
- **Bruising and tenderness** at the fracture site.
- **Deformity (in displaced fractures)**.
- **Difficulty moving the wrist or fingers**.

Specific Work Modifications:

- **If your job involves typing or writing:** Use **voice dictation software, ergonomic keyboards, and wrist support**.
- **If your job requires manual labor:** Avoid **lifting, pushing, pulling, or using vibrating tools**.
- **If your job is desk-based:** Keep the **wrist elevated** to reduce swelling, and use a **soft wrist rest**.
- **Avoid:** Heavy lifting, repetitive wrist motions, and prolonged strain on the affected hand.

Specific Activity Modifications:

- **If you play sports:** Avoid **contact sports, racket sports, and weightlifting** until cleared by a doctor.
- **If you do yoga or Pilates:** Modify wrist-bearing poses (e.g., plank, downward dog) to reduce joint stress.
- **If you play an instrument, knit, or garden:** Use **larger-handled tools** and modify grip positions.

- **Avoid:** Impact activities, repetitive wrist bending, and gripping-heavy tasks.

Recommended Supplements:

- **Calcium & Vitamin D** - 1000mg/800 IU daily for bone healing.
- **Collagen Peptides** - 10g daily to support bone and soft tissue repair.
- **Magnesium** - 300-400mg daily for bone strength and muscle relaxation.
- **Omega-3 Fatty Acids** - 1000mg daily to reduce inflammation.
- **Turmeric (Curcumin)** - 500-1000mg daily for pain relief.

Recommended Nutrition and Hydration:

- **Increase Lean Protein** (chicken, fish, tofu, eggs) to support bone healing.
- **Eat Bone-Strengthening Foods** (leafy greens, dairy, nuts, seeds) to aid fracture repair.
- **Consume Anti-Inflammatory Foods** (berries, turmeric, green tea) to reduce swelling.
- **Limit Processed Foods & Sugars** to prevent inflammation.
- **Hydration:** Drink **8-10 cups of water daily** to support bone regeneration.

Home Exercise Prescription (Rehabilitation for Wrist Fracture)

Early Phase (0-6 Weeks, Immobilization & Healing):

- **Wrist Splint or Cast** - Wear a **cast or splint for 4-8 weeks** as directed by your doctor.
- **Finger Flexion & Extension** - Move fingers gently to prevent stiffness, **10 reps, 2x/day**.
- **Shoulder & Elbow Movements** - Maintain mobility in the upper arm, **10 reps, 2x/day**.

Strengthening Phase (6-12 Weeks, Restoring Mobility & Function):

- **Wrist Flexor Stretch** - Extend the arm, pull fingers back gently, **hold 20 seconds, 3x/day**.
- **Wrist Extensor Stretch** - Extend arm, pull fingers downward, **hold 20 seconds, 3x/day**.
- **Light Resistance Wrist Curls** - Hold a small weight, curl wrist up and down, **10 reps, 2x/day**.

Advanced Phase (12+ Weeks, Preventing Recurrence & Maintaining Strength):

- **Grip Strengthening (Soft Ball Squeeze)** - Squeeze a soft ball **5 seconds, repeat 10 reps, 2x/day**.
- **Forearm Pronation/Supination (Light Resistance Band)** - Rotate forearm palm-up and palm-down, **10 reps, 2x/day**.
- **Wrist Circles** - Slowly rotate wrists in both directions, **10 reps, 2x/day**.

Helpful Books:

1. *The Healthy Wrist Handbook: Exercises & Treatments for Wrist Pain & Injury* - Dr. Ross Clifford.
2. *Overcoming Wrist & Hand Pain: A Self-Help Guide* - Susan J. Barnhart, PT.

Click here for more orthopedic patient information.

Contact a Key West orthopedic clinic or reach out to Dr. Jason Pirozzolo.