

De Quervain's Tenosynovitis

Diagnosis Explanation:

De Quervain's Tenosynovitis is an **inflammation of the tendons** in the wrist at the **base of the thumb**, caused by **repetitive hand motions, gripping, or direct injury**. It affects the **abductor pollicis longus (APL) and extensor pollicis brevis (EPB) tendons**, making **thumb and wrist movement painful**.

Symptoms:

- **Pain and swelling** at the base of the thumb, extending into the wrist.
- **Difficulty gripping, pinching, or twisting objects** (e.g., opening jars, lifting a baby).
- **Pain worsens with wrist movement and thumb use.**
- **Crepitus (grinding sensation)** in severe cases.

Specific Work Modifications for:

- **If your job involves typing or writing:** Use an **ergonomic keyboard and mouse**, and take **frequent breaks**.
- **If your job requires manual labor:** Use **wrist braces** and avoid **repetitive pinching and gripping**.
- **If your job is desk-based:** Keep wrists **neutral**, adjust desk height, and use **adaptive tools** if needed.
- **Avoid:** Repetitive gripping, excessive wrist motion, and prolonged forceful thumb use.

Specific Activity Modifications:

- **If you play an instrument or do crafting:** Modify technique and use **larger-handled tools** to reduce thumb strain.
- **If you play sports:** Avoid **racket sports, golf, weightlifting, and activities that require gripping**.
- **If you knit, garden, or cook:** Use **ergonomic grips** and take frequent breaks.
- **Avoid:** Repetitive thumb use, gripping-heavy activities, and forceful pinching.

Recommended Supplements:

- **Vitamin B6** - 50-100mg daily to support nerve and tendon health.
- **Magnesium** - 300-400mg daily to relax muscles and improve circulation.
- **Omega-3 Fatty Acids** - 1000mg daily to reduce inflammation.
- **Turmeric (Curcumin)** - 500-1000mg daily for pain relief.
- **Collagen Peptides** - 10g daily to support tendon and ligament repair.

Recommended Nutrition and Hydration:

- **Eat Anti-Inflammatory Foods** (salmon, leafy greens, turmeric, berries, nuts) to reduce swelling.
- **Increase Lean Protein** (chicken, fish, tofu, eggs) to support tendon healing.
- **Consume Hydrating Foods** (cucumber, watermelon, citrus) to maintain tendon flexibility.
- **Limit Processed Foods & Sugars** to prevent inflammation.
- **Hydration:** Drink **8-10 cups of water daily** to support tendon recovery.

Home Exercise Prescription (Rehabilitation for De Quervain's Tenosynovitis)

Early Phase (0-2 Weeks, Reducing Pain & Inflammation):

- **Wrist Splinting** - Wear a **thumb spica splint** to limit movement and allow healing.
- **RICE Protocol** - Rest, Ice (15-20 min, 3x/day), Compression, Elevation.
- **Passive Thumb Stretch** - Use the opposite hand to gently pull the thumb away from the palm, **hold 20 seconds, 3x/day**.
- **Radial Nerve Glide** - Extend arm, bend wrist backward, then slowly flex fingers, **10 reps, 2x/day**.

Strengthening Phase (2-6 Weeks, Improving Hand Strength & Endurance):

- **Thumb Opposition Exercise** - Touch thumb to each fingertip, **10 reps, 2x/day**.
- **Isometric Thumb Press** - Press thumb against index finger, hold **5 seconds**, repeat **10 reps, 2x/day**.
- **Finger Extension (Rubber Band Exercise)** - Wrap a rubber band around fingers, open hand against resistance, **10 reps, 2x/day**.

Advanced Phase (6+ Weeks, Preventing Recurrence & Maintaining Function):

- **Wrist Ulnar Deviation (Light Resistance)** - Hold a small weight, move wrist side to side, **10 reps, 2x/day**.
- **Thumb Resistance Exercise** - Use a resistance band to strengthen thumb movements, **10 reps, 2x/day**.
- **Grip Strengthening (Soft Ball Squeeze)** - Squeeze a soft ball **5 seconds**, repeat **10 reps, 2x/day**.

Helpful Books:

1. *The Hand and Wrist Pain Solution: Simple Exercises for Relief* - Dr. Ross Clifford.
2. *Arthritis and Hand Therapy: A Self-Help Guide to Managing Joint Pain* - Susan J. Barnhart, PT.

Click here for more orthopedic patient information.

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