

Intractable Pain in a Rheumatoid Wrist

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A 62-year-old woman had had long-standing rheumatoid arthritis (RA; > 20 years); the disease was presently in clinical remission, with mild activity, and she was receiving intermittent tumor necrosis factor antagonist (infliximab), weekly methotrexate (15 mg), and oral prednisone (5.0 mg).

She presented in the emergency room with acute severe wrist pain aggravated by certain positions. Clinically, there was an anterior cyst that was aspirated twice, with partial relief of pain the first time and no response on the following aspiration. Magnetic resonance imaging (Figure 1) showed the posterior interosseous nerve compressed by a bulging synovial cyst of the extensor pollicis longus tendon. Surgical exploration near the cyst (Figure 2) exposed the tendon and the nerve, which was decompressed after removal of the

tendon synovial sheath. Pathology investigation of the removed tendon sheath revealed nonspecific tenosynovitis. She became free of pain immediately after the procedure.

Posterior interosseous nerve entrapment is a rare complication of RA, usually caused by elbow joint swelling and compression of the nerve. Compression at the wrist level is a unique clinical presentation¹⁻³.

REFERENCES

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Figure 1. MRI reveals the posterior interosseous nerve compressed by a bulging synovial cyst of the extensor pollicis longus (EPL) tendon.

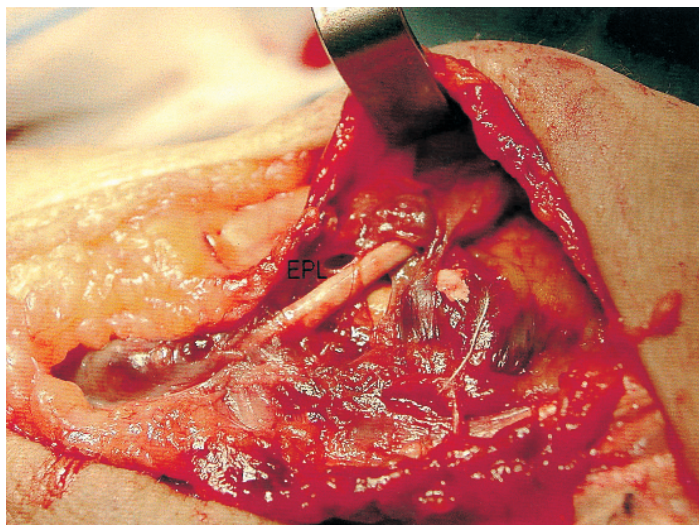


Figure 2. Surgical view of the extensor pollicis longus (EPL) and the synovial sheath.

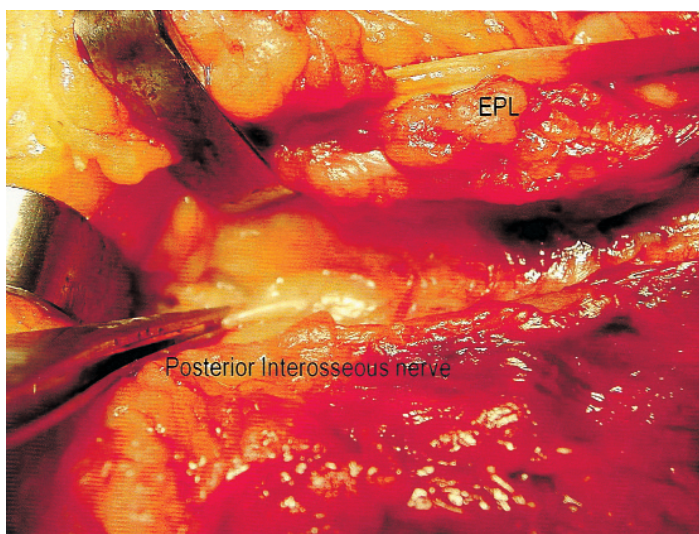


Figure 3. Exposure of the nerve after displacement of the tendon.

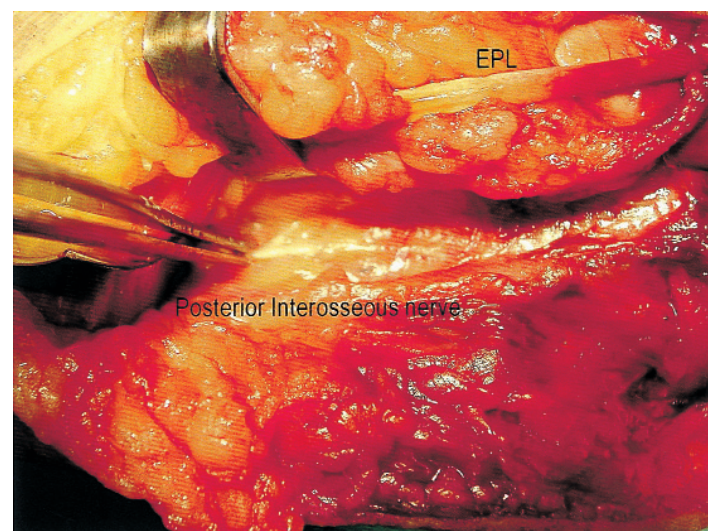


Figure 4. After removal of the synovial sheath, the tendon is relocated and free.