

"Unexpected Twist: The Mystery Behind a Popping Wrist Swelling"

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INTRODUCTION:

Osteoarticular Tuberculosis (TB) of the wrist is rare, constituting for less than 1% of all skeletal TB cases across various age group¹. Diagnosis is often difficult as the clinical presentation is atypical, hence needed high index of suspicion.

REPORT:

The patient is 72 year old lady presented with left wrist pain and swelling since 4 years, following trauma, which was worsening for the past few months. She had history of multiple injections over the area due to unresolved pain. Otherwise, no significant constitutional symptoms. Upon examination, there was a lobulated, non tender palpable swelling at left wrist, involving both volar and dorsal aspect, cystic in nature with wasting of both thenar and hypothenar muscle (Fig. 1). Neurovascular examination was unremarkable. X-ray showed diffuse osteopenia with erosion of distal radius-ulna and carpals including increased soft tissue shadow (Fig. 2). Infective markers were within normal range. MRI revealed numerous fluid collections with multiple compartments and rim enhancement in the wrist area, accompanied by bone edema surrounding the lesion. She underwent ultrasound guided biopsy. Tissue HPE showed necrotic chronic granulomatous tissue and tissue cultures were negative for both pyogenic and tuberculous pathogens. Surprisingly, the sample tested positive for GeneXpert and Interferon-gamma release assay (IGRA), supporting the diagnosis of TB wrist. Anti-TB medications was started and she remained compliant with the treatment regime. Upon follow up, she had pain relief, notable decrease in swelling and improve range of motion.



Figure 1



Figure 2

CONCLUSION:

Advanced tuberculous diagnostic tests like GeneXpert and IGRA have significantly contributed to TB diagnoses, particularly in unusual sites such as the wrist joint, when TB is strongly suspected. This could aid in early detection and prompt initiation of treatment to stave off complications².

REFERENCES:

1. Bayram S, Ersen A, Altan M, Durmaz H. Tuberculosis tenosynovitis with multiple rice bodies of the flexor tendons in the wrist: a case report. *Int J Surg Case Rep.* 2016;27:129e132.
2. Bush DC, Schneider LH. Tuberculosis of the hand and wrist. *J Hand Surg Am.* 1984;9(3):391e398.