

## A Rare Case of Neglected Painful TB Synovitis of Left Wrist

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### INTRODUCTION:

Tuberculosis is an endemic disease in Malaysia caused by *Mycobacterium tuberculosis*, primarily affecting the lungs. Despite the overall incidence of TB in Malaysia is decreasing, there is a rise in cases of extra-pulmonary TB.

Tuberculous infection of the musculoskeletal system comprises 10% of extra-pulmonary TB commonly affecting the spine, hip and knee while involvement of the wrist is rare.

### REPORT:

Ms. S is a 72-year-old Malay lady, NKMI, left-hand dominant, presented with pain and swelling over left wrist since 2020 after falling on her outstretched hand. She initially visited a private clinic and had an X-ray which was reported as normal. Due to persistent pain, she had sought repetitive treatment and received multiple injections in her wrist.

The pain and swelling became severe and disturbed the function of her hand, especially gripping and grasping, however she denied having any constitutional symptoms. Clinically, there is a diffused circumferential swelling over the left wrist, firm in consistency, without overlying skin changes, reduced range of motion, wasting of the thenar and hypothenar muscles.

Blood parameters are normal, but X-ray shows increased soft tissue shadow and osteolytic lesions in the carpal bones. She hesitated for a biopsy during first visit, until a subsequent appointment when the pain was worsening and the swelling was extending to the proximal forearm with presence of recent weight loss. MRI examination shows a multiple rim-enhancing encapsulated cystic fluid collections at the distal radio-ulna and carpal region, suggesting either avascular necrosis or osteomyelitic changes of the carpal bones.

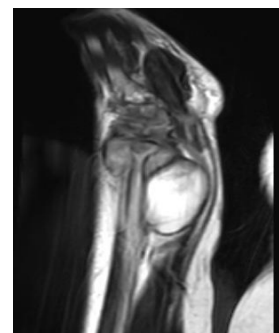
Diagnosis inconclusive at first, but was confirmed through TB genotyping. Thus anti-TB medications was commenced. .

### DISCUSSION:

Although extra-pulmonary TB affects any part of the body, however TB synovitis of the wrist is rare. Swelling around the wrist may compress surrounding structures which lead to compressive neuropathy, gangrene from the vessels occlusion and impaired hand function.



**Figure 1.** showing soft tissue shadow over distal radius and ulna with osteolytic lesions of carpal bones



**Figure 2.** showing T2-weight MR image encapsulated fluid collection over distal radio-ulna and carpal region

### CONCLUSION:

Due to the insidious onset and potential delayed presentation of the disease, any patient presenting with wrist swelling and suspicious radiological findings should be thoroughly investigated. Delay in management could impact the fine motor function of the hands thus quality of life of the patient .

### REFERENCES:

1. (2019).[Review of *Tuberculosis of the wrist mimicking rheumatoid arthritis - A rare case*]. *International Journal of Surgery Case Reports*.