Tuberculous tenosynovitis of the elbow – a rare disease and case report

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Abstract

We report a 66-year-old female who suffered from right forearm chronic ulceration wound with fistula formation for 4 months. Mycobacterial tuberculosis was found from the wound lesion one month later. The wound lesions completely healed after six months of treatment. A high index of suspicion in high-risk individuals with chronic monoarthritis is required to avoid delayed diagnosis.

Case report

A 66-year-old female was admitted to our hospital due to right forearm wound with discharge, right elbow and forearm swelling, redness and pain for 4 months. Joint pain or swelling attributed to simple sprains during the manual work and local trauma. Physical examination showed right upper limb elbow edema, erythematous, mild tender and warm with no limitation of movement. **(Fig 1)** Another ulcer was found (2 x 1 cm) over volar surface of ulnar aspect, deep to fascia penetration to dorsal side. **(Fig 2, 3)** X-ray of right forearm and wrist showed no evidence of bony lesions. (**Fig 4)** CXR also reveal no active lung lesion. Wound culture was normal. Empirical antibiotic

treatment with augmentin plus gentamicin was done but in vain. Because of chronic progressive tenosynovitis, discharge sinus ulceration wound, poor response to traditional antibiotic, she was treated with standard anti-tuberculosis therapy. Wound culture grew Mycobacterial tuberculosis one month later. The wound lesion was completely healed after six months treatment. **(Fig 5,6)**

Conclusion

In Taiwan, the high prevalence of tuberculosis was noted including the pulmonary tuberculosis and extrapulmonary tuberculosis. Tuberculous tenosynovitis is an uncommon extrapulmonary tuberculosis. Joint pain or swelling therefore may be attributed to simple sprains during the manual work and antecedent local trauma. Early TB arthritis has no characteristic radiographic findings to distinguish it from non-infectious inflammatory arthritis such as rheumatic arthritis or gout. The insidious onset and slow progression of symptoms usually result in delayed diagnosis. Surgical debridement and histologic and bacteriologic studies are essential to make the diagnosis. There should be a high index of suspicion in high-risk individuals with chronic progressive tenosynovitis, insidious nature, minimal signs of local inflammation, sinus fistula formation and poor response to traditional antibiotic therapy.

Fig 1: Right upper limb (elbow to wrist) showed local edema, erythematous, mild tender and warm with no limitation of movement.

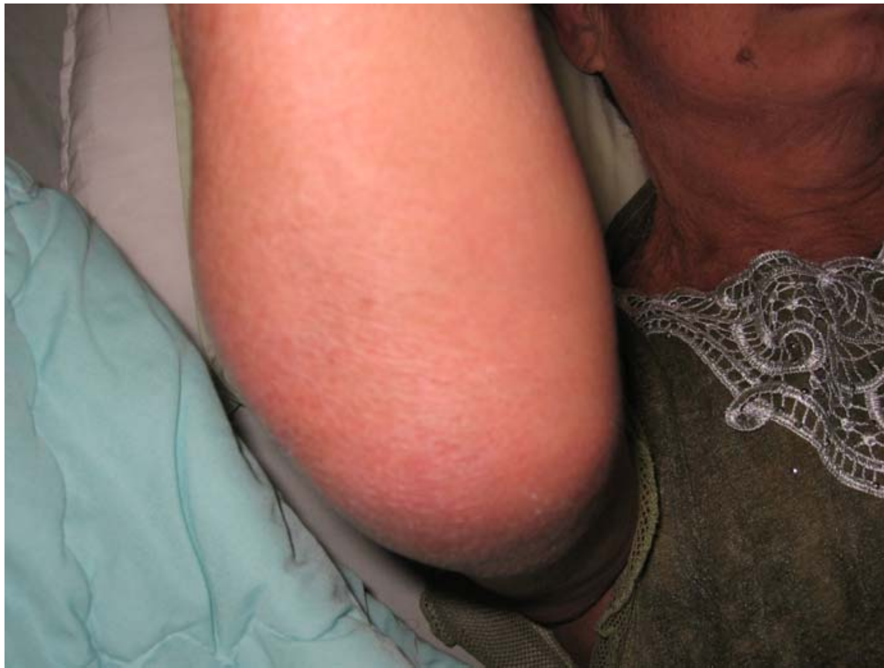
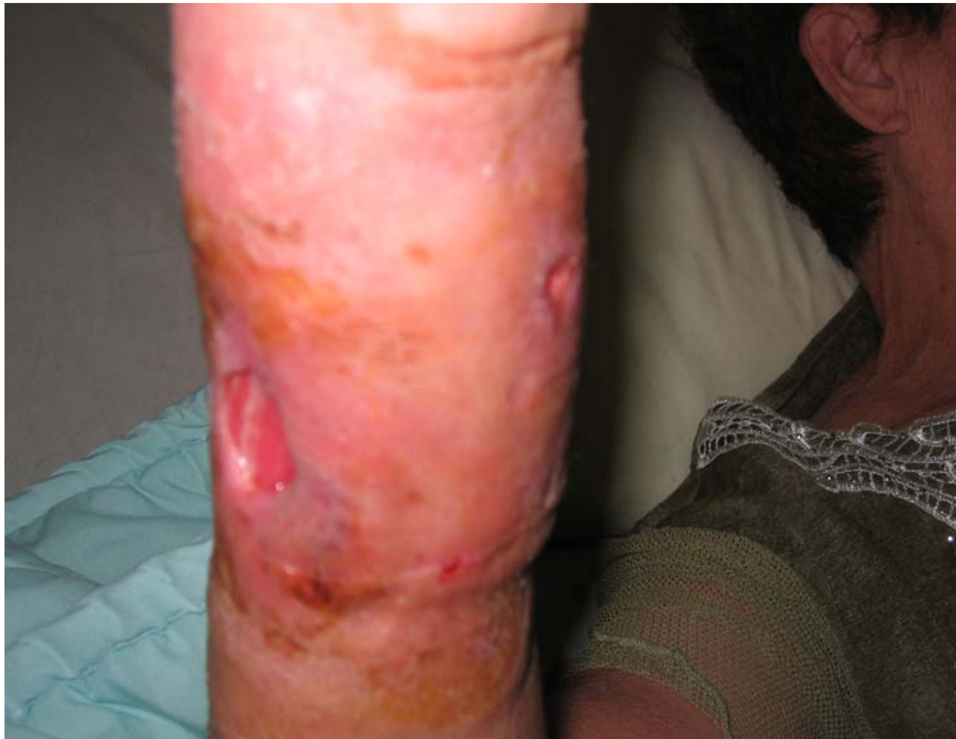


Fig 2 , 3: Ulceration wound (2 x 1 cm) over volar surface of ulnar aspect, deep to fascia penetration to dorsal side.



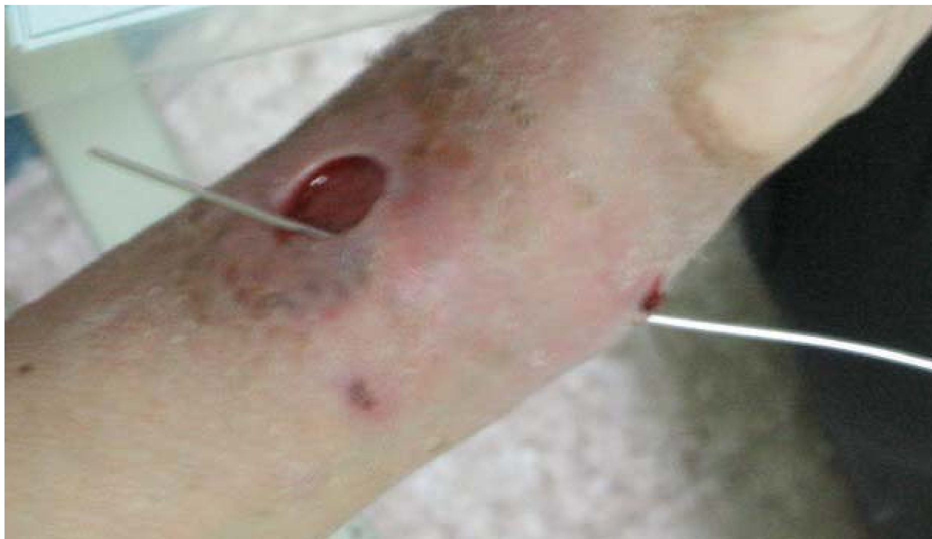


Figure 4: X-ray of right forearm and wrist showed no evidence of bony lesions

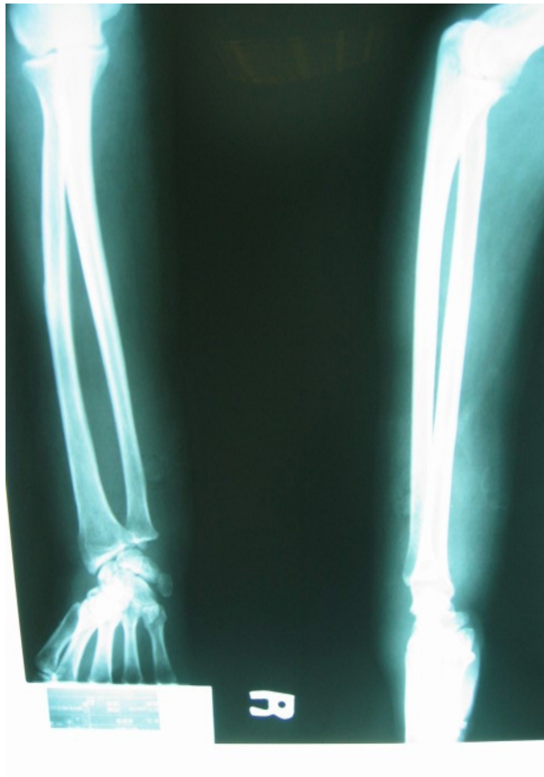


Figure 5. **6:** The wound lesions completely healed after anti-tuberculous therapy for six months.