

# *POCUS FOR EARLY DIAGNOSIS OF FINGER TENOSYNOVITIS*

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**Case Presentation:** A 53 yr old male presented with signs of infection to left ring finger for one day. He had a history of biting his nails and was not immunocompromised. Clinically, finger was held partially flexed with pain on passive extension. There was no fusiform swelling.

## **Management and Outcome:**

Clinically patient met 2 out of 4 Kanavel's signs of infective tenosynovitis. Point of care ultrasound (POCUS) was done to look for signs of flexor tenosynovitis. Hypoechoic or anechoic fluid surrounding the flexor tendon was shown and early escalation to hand surgeons was done. Patient was started on oral flucloxacillin and was regularly followed up by hand/ plastic surgeons. Eventually he needed 2 weeks' worth of antibiotics and no operation.

## **Key learning point:**

Kanavel's signs of infective tenosynovitis were first reported in 1912 and since then there have been no prospective studies regarding its sensitivity and specificity.

**Demonstration of hypoechoic/ anechoic fluid around the tendon sheath on ultrasonographic assessment has been associated with this diagnosis.** It's particularly useful in patients who present early (within 48 hrs of symptoms), since they can have fewer Kanavel's signs, thus leading to delay in diagnosis and appropriate management.

Thus POCUS may assist in the early diagnosis of infective flexor tenosynovitis.

**Since cases diagnosed early can be managed non-operatively, POCUS can lead to increased success of conservative management of infective flexor tenosynovitis.**

