# Is Fungal Tenosynovitis of Hand Rare? A Case Series of Fungal Tenosynovitis of Hand

<sup>1</sup>Rosli SM; <sup>1</sup>LAzura; <sup>1</sup> Lee JA; <sup>1,2</sup>M Nazarallah MH; <sup>1</sup>Loong YS,

<sup>1</sup>Orthopaedic Department, Hospital Ampang, Malaysia, <sup>2</sup>Universiti Sains Islam Malaysia

#### INTRODUCTION:

Fungal infections involving the tenosynovium of the upper extremity are uncommon but often undiagnosed (1). However, we are seeing an increase in cases of fungal tenosynovitis of hand. Fungal should be considered in the differential diagnosis of any hand infection especially in an immunocompromised person (2).

#### CASE 1

A 49-year-old gentleman with underlying Acute Myeloid Leukemia post allogenic stem cell transplant presented with six weeks history of right wrist pain. On examination, there is swelling over the dorsum aspect of right hand and fixed flexion of all fingers. His blood culture grew Trichosporan Asahii Fungiemia. Incision and drainage of right hand found a thick yellowish discharge (Figure 1) where the fungal culture grew Candida Tropicalis. Patient was started on Oral Posaconazole. His wound showed improvement but unfortunately patient succumbed due to neutropenic sepsis with disseminated fungal infection.

#### CASE 2

A 71-year-old lady with known case of diabetes mellitus and atrial fibrillation in failure presented with flexor tenosynovitis of left ring finger due to alleged cat bite. The examination revealed a chronic wound over dorsum of left hand and circumferentially swollen ring finger (Figure 2). The severity of the infection warranted a Ray amputation of left ring finger which fungal culture grew *Sporothrix Schenckii complex*. Patient was treated with Oral Itraconazole. However, with her concurrent heart failure and worsening sepsis, patient also succumbed after only a week of treatment.

### CASE 3

A 63-year-old lady with underlying diabetes mellitus had ten days history of sausage-like right ring finger swelling after she accidentally pricked her ring finger on a flower thorn. Incision and drainage surgery revealed suppurative flexor tenosynovitis of right ring finger. Patient ends up with Ray amputation of right ring finger. Tissue culture grew both *Candida Albicans* and *Klebsiella sp.* After two weeks of IV Unasyn with additional of oral Ketoconazole, her wound improved and patient was discharged well.





Figure 1

Figure 2

## **CONCLUSION:**

Fungal tenosynovitis of hand remains a rare condition (1) However, a high index of suspicion of fungal infection should be considered in the immunocompromised. Habit of taking fungal culture in suspicious wound should be encouraged to correctly diagnose the cause.

#### **REFERENCES:**

1. Maureen A. O!Shaughnessy, MD et al, A Rare Diagnosis: Recognizing and Managing Fungal Tenosynovitis of the Hand and Upper Extremity. The Journal of hand surgery 2. Amirtharajah M, Lattanza L. Fungal infections of the hand. Curr Orthop Prac. 2010;21(6):564e567.