

Palm–Oil Thorn Injury Causing A Mass In The Finger: A Forgotten Pathology In An Urban Area

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INTRODUCTION:

Palm oil thorn injury is common in regions where the plant is cultivated. It has a latent period with a pain free and asymptomatic phase until the inflammation phase which could well be months after the initial injury. This type of presentation especially in an urban setting can result in a puzzling presentation. We present a case of synovitis in the PIPJ of the index finger after a long 5 months lapse of time when the patient was initially pricked by a palm oil thorn.

MATERIALS & METHODS:

A 41-year-old male factory technician in an urban area, presented with a one month swelling over the PIPJ of his right index finger. The swelling was increasing in size but did not limit his motion. He had no numbness, fever or constitutional symptoms. Five months prior to presentation, he mentioned an incident when a palm-oil thorn pricked into his right index finger on a palm oil farm. He had forgotten the incident and claimed to have removed the thorn completely. He had no subsequent problems and did not seek any medical attention.

He had uniform swelling overlying the proximal interphalangeal joint of the index finger (Fig.1) that was soft, non tender, not erythematous and not warm. Range of motion was full and the patient is able to perform a full grip.



Fig 1. Diffuse 2x2cm swelling of the PIPJ of the right index finger.



Fig 2. Intraoperative findings of hypertrophic synovium with no pus or discharge

RESULTS:

Radiographs showed no bony involvement or any foreign body. Ultrasound reported tiny 2mm echogenic lines with a possibility of a foreign body. There was fluid collection

tracking into the PIPJ with increased vascularity around this collection suggestive of inflammatory changes.

We proceeded to excise the swelling under local anaesthesia. A longitudinal incision was made over the dorsal surface of the PIPJ. After dissection of the subcutaneous tissue, the extensor expansion and the joint capsule was incised and split. The synovial tissue surrounding the joint was hypertrophic with no evidence of infection. The articular cartilage appeared healthy (Fig. 2). Synovectomy was performed and a fine thorn particle was found embedded inside the synovial tissue (Fig.3). The joint was irrigated with copious amounts of saline, prior to the closure of the joint capsule and skin were closed.

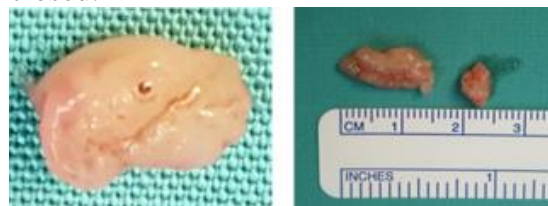


Fig 3. A thorn particle discovered embedded inside the hypertrophic synovial tissue

DISCUSSION:

The typical clinical presentation is a transient swelling after the initial injury. Once the swelling subsides, there is an asymptomatic period before re-emergence of the inflammation and swelling. The period between the injury and the time of presentation is a mean duration of 3 to 4 months. The delay of seeking help is believed to be due to incomplete removal of the thorn particle with most patients unaware of the incident. Most investigative methods are inconclusive. Definitive treatment includes surgical exploration, removal of the thorn particles and debridement of the surrounding tissue.

CONCLUSION:

A prick by a palm oil thorn is a forgotten injury in the urban setting of countries with palm-oil industries. We need to have a high index of suspicion and the importance of a detailed history to link any possibilities as