

MALLET THUMB

¹Sivapragasam, Shyamala; ² A.S.Nawfar;

¹Orthopaedic, Hospital University Sains Malaysia, Kampus Kesihatan, Jalan Raja Perempuan Zainab 2, Kubang Kerian, 16150 Kota Bharu, Kelantan, Malaysia

INTRODUCTION:

Mallet thumb is a rare condition with only a handful of cases reported worldwide, last reported in 2017. This resulted in a shortage of evidence and still little guidance for the diagnosis and treatment of closed mallet thumb injuries.(1)

REPORT:

A 23year old Dental student with 3 months history of hit by basketball. Unable to recall the mechanism of injury as pain only noticed much later in the night while resting. Her main complaint is pain over the right thumb and inability to lift the distal portion of the thumb. She sought medical attention at Klinik Warga but was discharged well. 3 months later she sought Orthopedic referral as her inability to extend her thumb was persistent. On examination of thumb, it was at 30 degree flexion, with inability to actively extend. However maintenance of full extension on passive flexion. All other functions of thumb was preserved. Xray shows subluxated thumb with minimal cartilage destruction. Our working diagnosis was right mallet thumb with differentials of chronic interphalangeal joint subluxation. We proceeded for operation, right extensor pollicis longus tendon (EPL) repair and K wiring of the right thumb under Wide Anesthesia and Local Anesthesia Technique. Upon incision, lazy S style of the skin and subcutaneous fat, we noted a lot of fibrosis covering the joint, we proceeded with debridement of the fibrosis and noted 80 percent of EPL cut, fixed with prolene 5/0, cloverleaf technique. A k wire size 1.4 was inserted to keep the thumb in extended position. She was discharged home well.

As there very few suggestion from literatures in managing mallet thumb Ultrasound and MRI were the only method suggested to confirm the

Figure 1: Intraoperative Pictures



diagnosis (2), however in view of shortage of services in our setting, we proceeded for exploration based on clinical findings. A repair of the EPL tendon will be required for her work demand in the future.

CONCLUSION:

No doubt this is a rare occurrence, we should keep an open mind in diagnosing and treating this condition promptly.

REFERENCES:

- 1.Lee YC, Chiu HY, Shieh SJ. Unrecognized closed mallet thumb injury complicating a closed proximal phalangeal fracture of the thumb. *J Hand Surg Eur.* 2013;38:204–6. [PubMed] [Google Scholar]
- 2.Tabbal GN, Bastidas N, Sharma S. Closed mallet thumb injury: a review of the literature and case study of the use of magnetic resonance imaging in deciding treatment. *Plast Reconstr Surg.* 2009;124:222–6. [PubMed] [Google Scholar]