

PULVERTAFT TECHNIQUE (PT)- A CASE REPORT OF CHRONIC EXTENSOR TENDON HAND INJURY

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Introduction: Repairing a chronic extensor tendon hand injury is a great challenge due to abundant formation of fibrous tissue. Technique of repair which gives a good mechanical strength will offer better outcome by allowing early rehabilitation protocols. PT is one of the techniques that yields good mechanical strength.

Discussion: We are reporting a case of 19 years old boy with alleged MVA sustained closed right DRUJ disruption and multiple abrasion wound over the dorsum of right hand. Proper clinical examination was unable to perform because patient came in to ED with low GCS secondary to traumatic brain injury. After serial follow ups at our clinic, we noticed that he was unable to extend the index finger with chronic pain of the DRUJ. Right DRUJ reconstruction and tendon transfer using Pulvertaft technique tendon repair was done. Post operatively volar slab applied and physiotherapy was commenced after 4 weeks. Based on our assessment, we noticed a significant improvement in terms of hand functions and reduction of the wrist pain. We are still following up this patient for further assessment.

Conclusion: A strong and stiff tendon repair is needed to allow early rehabilitation protocols. PT technique consists of the donor tendon weaving through three incisions on the recipient, with a double-loop suture at both ends of the overlap, and four mattress sutures evenly spaced between the two end sutures¹. Traditional clinical guidelines advocated a minimum of three weeks of immobilization after surgery for healing of tendon repair¹. PT is one of the techniques that offer early mobilization of tendons. Although recent study showed that side-to-side technique is more superior in terms of mechanical strength, which allow immediate mobilization of the tendons, we advocate PT technique for this patient due to concurrent DRUJ disruption which need immobilization after surgery.