





## PIP Dislocation/ Volar Plate Avulsion Fracture

Dislocation of finger(s) with joint reduction and x-ray prior to review  
Review within 7 days post injury to prevent prolonged immobilisation

Assess	Splint	Exercises
Active AROM <ul style="list-style-type: none"> <li>FDP</li> <li>FDS</li> </ul> Point tenderness <ul style="list-style-type: none"> <li>volar plate</li> <li>collateral ligament insertions<sup>1</sup></li> <li>Central slip<sup>2</sup></li> </ul> X-ray <ul style="list-style-type: none"> <li>Fracture fragment<sup>3</sup></li> <li>Joint enlocation</li> </ul> Pain & Oedema	Dorsal Thermoplastic in comfortable extension 0-30°. Oedema management. If splinting in flexion serial splint changes to achieve 0° extension by 3 weeks  Simple sprain injuries with minimal pain, oedema and good ROM may be protected with buddy strapping alone <ol style="list-style-type: none"> <li>Isolated collateral ligament injuries may be managed with buddy strapping to the ipsilateral finger.</li> </ol> 	Blocked FDP and FDS Hooking Composite Flexion MCP Flexion IP extension 10 reps each 2 hours <b>Advice</b> Remove splint for hand hygiene +/- to perform exercises. Light pain free use of the hand in splint encouraged. <b>Progress</b> Remove Splint for light pain free use of the hand at 3 weeks but continue at risk and night. Cease protective splint at 6 weeks. Manage flexion contracture or joint stiffness if present. Strengthen if indicated

- Central slip involvement treat as zone III Extensor tendon injury
- Avulsion fractures >25% joint surface splint in 30° flexion with x-ray to confirm enlocation and are managed in conjunction with Hand Clinic

**Outcomes:** Pain free functional use of the digit expected with over 50% of patients experiencing good resolution of symptoms at one month. Less than 20% of patients may experience some swelling and stiffness past 6 months.

### References:

Jespersen B, Nielsen NS, Bonnevie BE, Boeckstyns ME. Hyperextension injury to the PIP joint or to the MP joint of the thumb – a clinical study. *Scand J Plast Reconstr Hand Surg* 1998;32:317-2

Little K & Jacoby S (2011) Intra-articular Hand Fractures and Joint Injuries. In Skirven et al, *Rehabilitation of the Hand and Upper Extremity* 6<sup>th</sup> Ed. Elsevier pp 403-407