Fleck's Sign Of Distal Radioulnar Joint Dislocation: A Case Report

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INTRODUCTION:

Locked dorsal Distal RadioUlnar Joint(DRUJ) dislocation is a rare condition, left untreated would cause significant disability. We highlight a case of DRUJ dislocation that indicated for early surgery.

CASE REPORT:

A 17 years old gentleman presented at 6 weeks post MVA with painful swelling of the left wrist. Clinically, the left forearm was in pronation and distal ulnar head was prominent with limited rotation especially supination. Wrist radiograph revealed dorsal dislocation of DRUJ with fleck of bone palmar to the ulnar head (Figure 1). Diagnosis of locked dorsal DRUJ dislocation with displaced ulnar styloid fracture and Triangular Fibrocartilage Complex(TFCC) tear (Palmer 1b) was made.

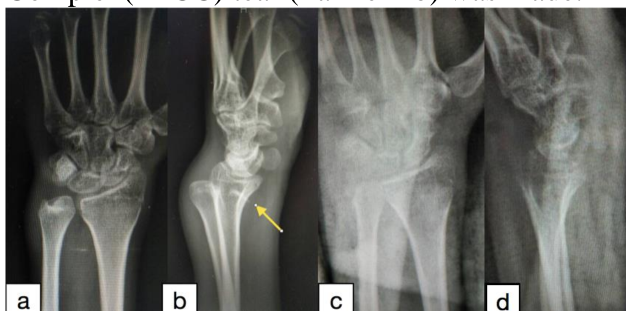

Figure 1: Trauma wrist radiograph (a) and (b) with arrow pointed a fleck of bone at palmar side of ulnar head. Post-surgery wrist radiograph (c) and (d).

Surgery was done with intraoperative findings shown in Figure 2. Transosseous TFCC repair was performed with outside-in technique. Post operative radiograph as in Figure 1. Sugar tong splint applied in fully supinated forearm for 2 weeks followed by another 2 weeks in neutral. Subsequently, volar slab was applied and forearm rotation exercise started.

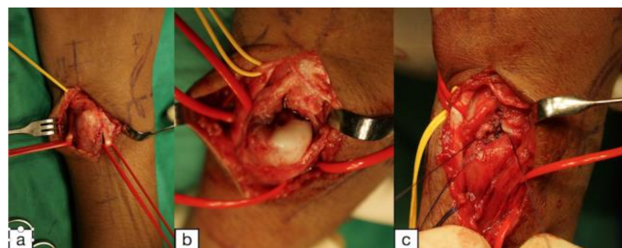

Figure 2:(a) Dorsal dislocation of ulnar head through dorsal capsule and ECU subluxation palmarly. (b) Non-union ulnar styloid process with empty fovea indicate TFCC detachment (c) Transosseous TFCC repair

DISCUSSIONS:

Dorsal DRUJ dislocation commonly due to hyperpronation force. In simple dislocation, it is reducible and stable with maneuver of traction, palmar directed force over the ulnar head and supination[1]. However, complex dislocation is irreducible and commonly caused by impingement of displaced ulnar styloid fracture or TFCC, subluxation of ECU or impacted ulnar head fracture. This could be recognized clinically and radiologically[2]. In our case, presence of fleck of bone on the palmar side of ulnar head indicated a displaced ulnar styloid fracture with TFCC which blocked the reduction of DRUJ. Therefore, warranted for early surgery to ensure better outcome.

CONCLUSION:

In managing DRUJ dislocation, high index of suspicion is advocated. Recognition of patient that requires early surgery is essential.

REFERENCES:

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2. Tang et al., A Rare Combination: Locked Volar Distal Radioulnar Joint with Isolated Volar Capsule Rupture. Hand Surgery.2014; 19(3):413-417.