

CHRONIC DISTAL RADIOULNAR JOINT DISLOCATION AND RADIAL HEAD FRACTURE: HOW I DEAL WITH IT

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INTRODUCTION:

Distal radioulnar joint (DRUJ) is the articulation between ulnar head and sigmoid notch of distal radius. As the radius of curvature of the sigmoid notch is 50% greater than the ulnar head, its skeletal structure provide limited and minimal stability to the DRUJ. Thus, its stability is mostly contributed by the surround soft tissue such as triangular fibrocartilage complex (TFCC), pronator quadratus muscle.

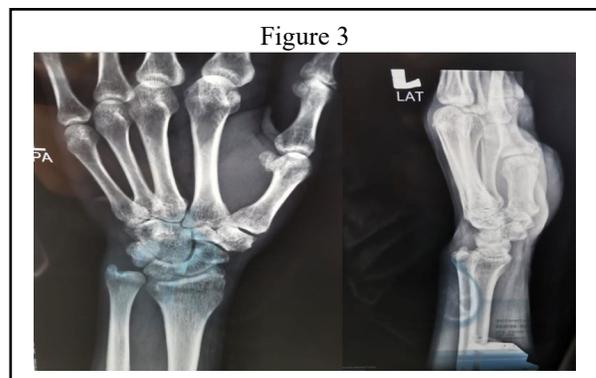
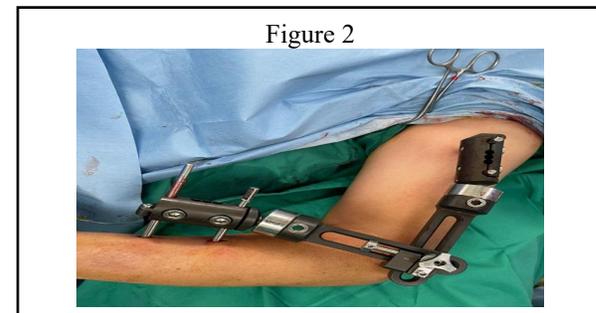
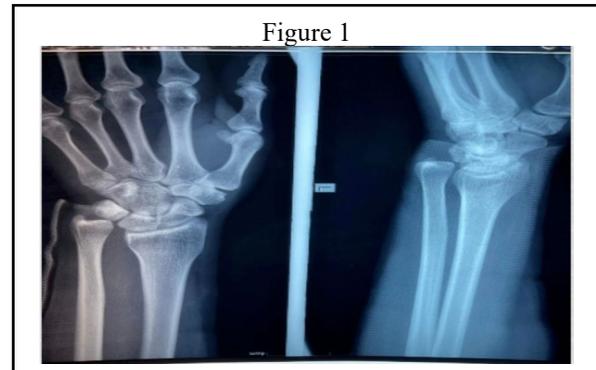
REPORT:

A 45-year-old professional cyclist fell onto his left outstretched hand and sustained left DRUJ dorsal dislocation and left radial head fracture. At first, he opted for non-surgical approach. Hence, closed reduction and immobilization with above elbow cast and splint was offered. He was then under regular follow up until three months later, he agreed for operative approach in view of persistent pain and stiffness over wrist and elbow joints with limited range of movement. Repeated x-ray showed no improvement in fracture healing and consistent DRUJ disruption. (Figure 1).

Several surgical options which are common practices such as ligament reconstruction, Sauve-Kapandji, resection arthroplasty was discussed with patient. Eventually, we decided on elbow fixator. Firstly, it is less invasive. Secondly, it allowed stable, controlled movement around the axis of rotation of the elbow joint as well as mitigate post traumatic elbow stiffness. Thirdly, it indirectly stabilized the DRUJ. (Figure 2)

After 6 weeks, the elbow fixator was removed. Radial head arthroplasty was done.

After several weeks of rehabilitation, his wrist and elbow range of motion improved and able to return to his training as professional cyclist. (Figure 3).



CONCLUSION:

Early and appropriate treatment for DRUJ is utterly important as inadequate healing of the DRUJ stabilizer will greatly reduce the biomechanical function of wrist. Thus, DRUJ dislocation should be addressed as soon as possible.

REFERENCES:

1. Scott.W, William.P, S.K, M.C. (2021). *Green's Operative Hand Surgery* (8th ed.). Elsevier.