

An Anatomic Reconstruction Of Chronic Distal Radioulnar Joint Instability With Adams-Berger Procedure In Malunion Distal Radius

CheSaidi SZ, Aidit S, Nor s, MatJusoh K, Yusoff NZ.

Department of Orthopaedic, Hospital Raja Perempuan Zainab II, Kota Bharu, Kelantan, Malaysia

INTRODUCTION:

Distal radioulnar joint (DRUJ) has important role in wrist motion. Its instability can lead to chronic wrist pain and loss of hand function due to reduced forearm rotation and decreased grip strength. Numerous reconstructions has been described. Adams and Berger described the anatomic reconstruction of the distal radioulnar ligaments using a tendon graft in 2002 with aims to restore kinematics and function of the DRUJ.

REPORT:

A 22-years old lady, right hand dominant, alleged in motor vehicle accident in May 2015, she had pain of left wrist, however did not seek medical attention. Subsequently ,she had history of trauma of her left wrist in 2020. She presented to us with complaint of chronic left wrist pain with limitation in supination and pronation of left wrist. Upon further investigation, she was diagnosed as malunion of distal end radius with chronic instability of DRUJ. Preoperatively, hand in mid prone position with wrist in 30° volar angulation and prominent ulnar styloid. Wrist radiograph showed disruption of DRUJ with malunion of distal radius.

She underwent operation of corrective osteotomy and buttress plating of left distal end radius with distal radioulnar joint reconstruction using palmaris longus tendon. (Adams –Berger Procedure).

Postoperatively, patient was pain free and wrist range of motion markedly improved .Supination and pronation 0-70°, extension 0-45 ° and flexion 0-60 °. Post operative radiograph showed restoration of radial inclination and alignment.

Figure 1: Pre and Post- Operative Xrays



Figure 2: 4 Months Post Reconstruction



CONCLUSION:

Adams-Berger Procedure has been the preferred technique in treating chronic DRUJ instability reconstruction which has been shown by previous study to give good outcomes in symptomatic relief of pain, improved instability as well as functional status .

REFERENCES:

1. Chronic Instability of the Distal Radioulnar Joint; Adams et al, Journal of the American Academy of Orthopaedic Surgeons 15(9):p571-575,September 2007.
2. Joshua et al , Journal of Wrist Surgery,2019 Aug;8(4):268-275