

Review Article

Isolated Dorsal Distal Radio-Ulnar Dislocation: About A Case and Review of the Literature

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Abstract: Isolated acute dislocation of the distal radioulnar joint is a rare lesion, and in 50 % of cases goes unrecognized; it may be palmar or dorsal. Its diagnosis is suspected when the wrist is traumatic, painful, with limited pronosupination and no fracture on radiological examination. Treatment is aimed at preventing the development of chronic instability and/or arthrosis, and consists of reduction followed by immobilization.

Keywords: Dorsal dislocation, Instability, TFCC, Closed reduction, Reeducation.

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INTRODUCTION

Dorsal distal radioulnar dislocation is a rare clinical entity in trauma surgery. Diagnosis is difficult and can go unnoticed. It should always be suspected in the presence of a painful traumatic wrist in the absence of a fracture.

Our work aims to educate doctors about the possibility of a distal radioulnar dislocation in front of a traumatic painful wrist.

MATERIEL

We report a case of isolated distal dorsal radio-ulnar dislocation occurring in a 38-year-old woman who suffered a fall at home, in whom the clinical examination revealed pain in the radio-ulnar compartment accentuated on pronosupination with protrusion of the head. ulnar compared to the contralateral wrist.

Standard radiographs of the wrist were performed and made it possible to establish the diagnosis of dorsal dislocation of the distal radio-ulnar joint.

The patient benefited from reduction of the joint and its fixation by placement of a Kirschner wire extra-

articularly then placement of an ante-brachio-palmar cast.



Figure 1: Initial x-ray of the patient showing the distal radioulnar dislocation with a healthy elbow



Figure 2: Post-reduction and post-pin osteosynthesis x-rays showing the reduced wrist

DISCUSSION

Distal radio-ulnar instability reflects a partial (subluxation) or complete (luxation) loss of contact between the distal end of the radius and that of the ulna. It can be acute or chronic. Depending on the direction of displacement of the ulna in relation to the radius, it is defined as either dorsal (the most frequent) or palmar.

Comparative examination with the contralateral wrist found abnormal and/or painful mobility of the distal end of the ulna as well as abnormal protrusion of the ulnar head on the dorsal side of the wrist.

Standard AP radiographs may show a diastasis, while the strict profile highlights any significant displacement of the distal ulna.

The palmar distal radio-ulnar dislocation must be urgently reduced under sedation by forced pronation of the forearm with pressure directed to the ulnar head. Irreducibility is often due to late diagnosis.

Whether by external or open maneuver, the reduction of the dislocation must be followed by immobilization with a brachial-antebrachial cast for a period of 6 to 8 weeks.

CONCLUSION

Dislocations of the distal radioulnar joint often go unnoticed. A history of recent injury with pronosupination block and retained flexion should alert

the clinician and radiologist to the possibility of such an occurrence.

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