

ISOLATED VOLAR DISLOCATION OF THE DISTAL ULNA AT THE DISTAL RADIOULNAR JOINT A CASE REPORT

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A case of a woman who sustained an acute, isolated volar dislocation of the distal ulna is presented.

The importance of proper physical examination and accurate radiographic positioning for this uncommon and easily missed injury is stressed.

Keywords : distal radioulnar joint ; dislocation ; wrist.

Mots-clés : articulation radio-cubitale inférieure ; luxation ; poignet.

INTRODUCTION

Isolated dislocation of the distal radioulnar joint (DRUJ) is a rare injury and is described in terms of the position of the distal ulna in relation to the radiocarpal joint.

CASE REPORT

A 67-year-old woman was seen at the emergency department with a painful wrist and the forearm locked in supination after a fall on the outstretched hand.

On the AP view of the forearm and wrist an overlap of the distal radius and ulna was seen (fig. 1a). On the lateral view the volar dislocation of the ulnar head was obvious (fig. 1b).

Using general anesthesia closed reduction was performed. The DRUJ remained absolutely stable after reduction.

A circular long-arm cast with the forearm in slight pronation was applied for 3 weeks. At 6 weeks the patient had no complaints and a full range of motion of wrist, forearm and elbow ;



Fig. 1a. — AP radiograph of an isolated volar dislocation of the DRUJ. Note the narrowing of the wrist and the superposition of the radius and ulna at the DRUJ. **b.** — Lateral view of the same patient showing the volar displacement of the ulna in relation to the radiocarpal joint.

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1 year after the injury these findings were confirmed.

DISCUSSION

Acute isolated dislocation of the DRUJ is rare, with volar dislocation of the distal ulna less common than dorsal dislocations (3, 4). Dislocations of the DRUJ have always been described on the basis of the direction of the ulnar head with respect to the radius despite the fact that the ulna is the stable bone of the forearm and the radius dislocates.

The mechanism of injury in ulna volar dislocation is hypersupination.

The physical examination invariably shows a forearm locked in supination, a narrow wrist and a dorsal dimple in the skin.

The standard radiographs of the wrist consist of a TRUE anteroposterior (AP) and lateral view.

The AP view typically demonstrates radial displacement of the distal ulna. On a lateral view the dislocation is obvious. It is imperative to have a true lateral radiograph because rotation makes an accurate assessment of the DRUJ impossible. In a true lateral view there is a superposition of the proximal pole of the scaphoid, the lunate, and the triquetrum with the radial styloid centered over them (2). For more subtle subluxation, CT scan is the study of choice.

Reduction of an acute isolated ulna volar dislocation can be difficult owing to the pull of the M. pronator quadratus. Reduction is done by digital pressure over the volar surface of the ulnar head mobilizing the ulna ulnarward while pronating the forearm.

Further treatment is guided by the recently introduced concept of simple versus complex DRUJ dislocations (1).

A simple dislocation is defined as one that reduces spontaneously or with minimal manipulation. If a simple dislocation is absolutely stable (as in our case-report) immobilize the forearm in slight to moderate pronation for 3 to 4 weeks in a long arm cast. If the DRUJ is stable but dislocatable, immobilize the forearm for 6 weeks.

If grossly unstable the DRUJ should additionally be transfixed with a K-wire.

A complex dislocation of the DRUJ is characterized by its irreducibility necessitating operative reduction.

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SAMENVATTING

G. PUTZEYS, T. SCHEERLINCK, P. HAENTJENS.
Een geïsoleerde luxatie van de distale ulna in het distale radioulnaire gewricht.

Een geval van een geïsoleerde volaire luxatie van de distale ulna wordt voorgesteld. De nadruk wordt gelegd op het belang van een goed klinisch onderzoek en een correcte radiografische evaluatie van dit zeldzaam en gemakkelijk gemist letsel.

RÉSUMÉ

G. PUTZEYS, T. SCHEERLINCK, P. HAENTJENS.
Luxation palmaire isolée du cubitus au niveau de l'articulation radio-cubitale inférieure.

Nous présentons un cas de luxation palmaire aiguë et isolée du cubitus au niveau de l'articulation radio-cubitale inférieure. Un examen clinique correct ainsi que des clichés radiographiques de bonne qualité permettent le diagnostic de cette lésion rare et facilement méconnue.