Interactive Hand Clinic: Dorsoulnar Wrist Pain
D Power, R Potter

Citation

Abstract
The authors present a series of self assessment cases in hand surgery that demonstrate unusual presenting pathologies to our tertiary referral hand unit. The first is a case of dorsoulnar wrist pain and the differential diagnosis, imaging and surgical management are discussed.

CASE REPORT
A 52 year-old left hand dominant plasterer with rheumatoid arthritis was referred by his GP with dorsoulnar wrist pain and swelling.

Figure 1

DESCRIBE THE CLINICAL APPEARANCE?
There is a multiloculated swelling at the level of the DRUJ extending under the extensor retinaculum at the level of the IVth and Vth extensor compartments onto the ulnar aspect of the dorsum of the hand.

WHERE IS THE SWELLING ARISING FROM?
The DRUJ

WHAT ARE THE IMPORTANT POINTS IN THE EXAMINATION?
Consistency of the swelling. A firm swelling suggests synovitis.

Wrist and forearm movements. Pain, crepitus and loss of supination suggest DRUJ arthritis.

Extensor tendon function. A loss of ring and small finger extension suggests rupture of the EDM and EDC to these fingers at the level of the DRUJ (Vaughn-Jackson lesion).

WHAT ARE THE COMPLICATIONS OF THIS CONDITION?
Subluxation of the ulnar head dorsally as the carpus subluxes volarly and ulnarswards.

Tendon attrition rupture to the ring and small fingers.

WHAT IS THE PATHOPHYSIOLOGY OF TENDON RUPTURE?
Synovitis, fibrosis, encasement, ischaemic necrosis, tendon attrition, tendon rupture.

Figure 2

Figure 1: Plain wrist radiographs

DESCRIBE THE SIGNIFICANT RADIOGRAPHIC FINDINGS
Loss of the normal DRUJ alignment with ulnar head cyst. Lateral view shows volar subluxation of the carpus.

HOW IS THIS CONDITION MANAGED?
Early management is systemic management of the
underlying disease. This patient has Rheumatoid Arthritis and was managed with NSAIDs for joint symptoms together with disease modifying therapy in the form of methotrexate. His synovitis continued to develop despite this. Early referral and surgical synovectomy is necessary to prevent tendon rupture and the synovectomy is performed through a dorso-ulnar incision and division of the extensor retinaculum and the dorsal capsule of the DRUJ. The synovectomy should follow the tendons distally to the hand. The ER can be repaired deep to the tendons to try to prevent rupture (exteriorisation of the extensors).

If already ruptured, extensor tenodesis can be performed at the same time.

**Figure 3**
Figure 2: Intra-operative photograph

**IF THE DRUJ PAIN PERSISTS, WHAT ARE THE TREATMENT OPTIONS?**
Distal ulnar excision (Darrach) may reduce the pain from the DRUJ.

**CORRESPONDENCE TO**
Dominic Power 84 Royal Worcester Crescent Bromsgrove Worcestershire, B60 2TA, UK Email: dominic.power@roh.nhs.uk Telephone: 0044 1527 870 206 Fax: 0044 1527 831 777

**References**
Author Information

D. M. Power
Department of Hand Surgery, Royal Orthopaedic Hospital

R. J. Potter
Department of Hand Surgery, Royal Orthopaedic Hospital