CONDITION Distal Radio Ulnar Joint Arthritis

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What is Distal Radio Ulnar Joint Arthritis?

The DRUJ is the joint between the end of the radius and ulna bones, just before the wrist. This joint is where forearm rotation occurs (twisting movements of the hand and wrist). There is also a pivot between the radius and ulna bones near the elbow and the two work together to allow forearm rotation.

Normal Wrist Xray

End of radius



Distal Radio Ulnar Joint

End of ulna

'Scalloping' of an arthritic DRUJ – a sign of danger for the extensor tendons

Arthritis at the base of the thumb is also present

'Scalloping' of distal radius – very obvious in this patient



Worn out end of ulna – odd shape

What is Distal Radio Ulnar Joint (DRUJ) arthritis?

Sometimes the DRUJ wears out and becomes arthritis. This is common with inflammatory arthritis patterns (such as rheumatoid arthritis) but can also occur with simple 'wear and tear' as in osteoarthritis. It is not clear why this joint should wear out in some people rather than others but it probably relates to the exact shape of the joint, how well aligned the radius and ulna bone are when they move against each other and any injuries that the joint sustains over time.

What symptoms do you get with DRUI arthritis?

Some people seem to tolerate damage to the DRUJ well but others develop pain in the joint. This is often worse with loading (heavier activity) and also with activities involving rotating the forearm (turning a key or screwdriver for instance).

Swelling around the ulnar (little finger) side of the wrist also occur. The extensor tendons (which straighten up the fingers) are particularly close to the back of

this joint, especially the tendons to the little finger. If the swelling in the joint is very marked the little finger extensor tendons can be involved and even tear apart and stop working. This is a very urgent situation to deal with as once one tendon has gone the next ones along are at increased risk of tearing.

In later cases the joint may become unstable resulting in clunking and clicking when the forearm is rotated.

How is the diagnosis of DRU arthritis made?

The story from you, the patient, and a careful examination usually suggest a problem on the ulnar side of the wrist.

An Xray of the wrist will often show characteristic changes of inflammatory or osteoarthritis some of which are predictors of problems with the extensor tendons.

A Magnetic Resonance Imaging (MRI) scan or Computerised Tomography (CT) scan is sometimes ordered to give more information about the soft tissues and joint alignment.

What treatments are available for DRUJ arthritis?

Most patients with this condition do not need surgery but manage with various combinations of painkillers, splints and activity modification.

Steroid injections might be offered to try and reduce local inflammation within the joint.

If the pain is more severe or the tendons are at risk surgery might be recommended. This might need to be arranged urgently if the tendons are showing signs of wear or have already torn. The surgery will need to address the underlying cause of the problem (dealing with the arthritic joint) as well as cleaning up (or repairing) the tendons. Various options are available for the joint including removing all or part of the joint or replacing the joint. A careful soft tissue repair is very important in all these operations. Your surgeon will advise you regarding this.

What are the results of treatment for DRUJ arthritis?

Once the joint has become arthritic or the tendons have worn through it is not possible to restore completely normal function of the tendons and joints. Treatment is aimed at relieving symptoms as much as possible and improving each patient's function. Caught early tendon damage can be minimised and good movement of the digits re-gained after surgery, with the help of the hand therapists.