Why do some people get ulnar abutment?

In some people the ulna is naturally a little longer than the radius. Sometimes this situation arises after the end of the radius has broken (see 'Distal Radius Fractures').

What happens if the ulna is longer than the radius?

Even a millimetre or two of increased length of the ulna can dramatically increase the load going through that side of the wrist when it is used. This load passes through the bones but also through the TFCC (see 'TFCC injuries'). If this side of the wrist is overloaded the TFCC is the first structure to become worn and frayed followed by the end of the ulna bone and the lunate on either side of the TFCC (see MRI scan picture).

What symptoms do you get with ulnar abutment?

Some people seem to tolerate a little extra length in the ulna well but others develop pain on the ulnar side of the wrist. 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 side of wrist may also occur and irritation of the tendons close by (see 'Tendonitis').

How is the diagnosis of ulnar abutment made?

The story from you, the patient, and a careful examination usually suggest a problem on the ulnar side of the wrist. An X ray of the wrist, taken in a standard way, will show whether or not the ulna and radius are level at the wrist. Usually an MRI, often with dye injected into the joint as well (called an arthrogram) will also be ordered. This is to give more information about the state of the joints around the ulnar head, the TFCC, the ligaments in the wrist and the tendons nearby.

What treatments are available for ulnar abutment?

Most patients with this condition do not need surgery but manage with various combinations of painkillers, splints and activity modification. If the tendons are inflamed specific hand therapy can be helpful.

Steroid injections might help to reduce local inflammation in tendons or within the joints.

If symptoms persist and are intrusive the next step could be to look inside the wrist joint with a small telescope (wrist arthroscopy).

More specific treatment then depends on what structures are damaged and how badly they are affected. Options might include repairing the TFCC, shortening the ulna or replacing the ulnar head, if it is very badly damaged (see Distal Radio Ulnar Joint Arthritis). Your surgeon will advise you regarding this.

What are the results of treatment for ulnar abutment?

This depends a little on exactly what is damaged but it is usually not possible to restore things completely back to normal. Treatment is aimed at relieving symptoms as much as possible and improving function.