# Wrist Arthritis Surgical Treatment

## THE WRIST FUSION OPERATION

The human wrist is a complex structure that allows delicate, controlled movement and so is necessary for many daily activities. The wrist is a complex structure of eight bones lying between the two forearm bones and the five hand bones. There are a large number of ligaments that hold the wrist bones together. If the joints between the bones become overloaded, the cartilage covering the bones will begin to break down, causing chronic pain, swelling and loss of movement. This is arthritis.

Wrist fusion is an operation done in cases of painful arthritis and involves removing the moving surfaces in the wrist in order to get those joints to fuse together. The surfaces to be fused include the end of the radius, most of the small bones in the wrist and the joint between the wrist and the base of the 3rd metacarpal. Thumb movement and forearm rotation are still maintained. The bones need to be held still whilst they fuse together. Most hand surgeons now use a specially designed plate to do this.

### AFTER THE OPERATION

A bulky bandage with a splint or plaster support incorporated will be applied after the operation. It is important to keep the dressings clean and dry. To reduce swelling, keep the arm elevated in a sling or on pillows and begin moving all the joints that are not immobilised as soon as possible to prevent stiffness. You are highly urged to take pain killers to reduce discomfort before the anaesthetic wears off and as necessary thereafter. About two weeks after the operation, an appointment will be made for a wound check, dressing change, removal of sutures (if needed) and a further splint or plaster cast to be made by the hand therapist. The plaster cast will then be completely removed 8-10 weeks after the operation. An X-ray will be taken to assess whether or not the bones have joined after three months. If this has been successful, rehabilitation continues with the use of a removable splint for intermittent support.

After 8-10 weeks, you can begin driving if you feel comfortable to do so. Light duties may commence after three months if X-rays are satisfactory. Contact sports and other strenuous activities may be reintroduced after four months and improvements in the wrist may continue up till a year.

#### **RISKS OF SURGERY**

Generally, this procedure is considered to be effective and low risk. However, some people may have problems. Swelling and stiffness of the wrist and surrounding arm is very normal and can be reduced by keeping the arm elevated and moving all the free joints as soon as possible. In most people the general swelling reduces dramatically in the first three weeks after the operation. Local swelling around the surgical site however can persist for several months. This can be helped by massaging the tissues and this may also improve any irritability in the surgical scar. Occasionally patients are troubled by more swelling and stiffness than average. In this case Complex Regional Pain Syndrome (CRPS) is sometimes the cause. Infection is rare. The chance of a non-union following this operation has been reported as about 7%. If the bones do not join together the joint can remain painful and the metalwork can start to work loose after some time. In either of these two cases further surgery might be necessary.

#### FOR ANY PROBLEMS OR FURTHER INFORMATION CONTACT:

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Note: These instructions are to serve as guideline and are subject to vary depending on the individual.