COMPLICATIONS OF HAND SURGERY

The rehabilitation of hands after surgery is particularly challenging. It has to satisfy the conflicting demands of wound healing and the maintenance of movement. Complications after surgery can compromise function and are be divided into two general groups.

Specific complications relate to the particular operation and will be discussed separately. Broadly these involve a failure to achieve the desired objective(s), a technical problem particular to the procedure, some aspect of recovery peculiar to the tissue involved or recurrence of a previously treated problem. Any of these problems may require surgery to be repeated. Non-specific complications can occur with any operation irrespective of its nature and are covered below.

**Wound**
Localised swelling and bruising are very likely after an operation and should substantially settle within weeks.

**Bleeding**
Some seepage from a wound is common, which can cause staining of a dressing. More seriously, blood can collect in the wound (haematoma), causing swelling and pain. This may necessitate the removal of sutures to allow blood to escape and/or a return to theatre to stop the bleeding.

**Infection**
Superficial infections are quite common (5%) causing a redness, swelling and pus collection particularly around the stitches. These usually settle within days if treated promptly with local wound measures and antibiotics. Deep infections in joint, bone or around tendons are fortunately very rare but cause tissue damage and significant long-term complications. Treatment may be prolonged and requires admission for antibiotics and surgery.

**Delayed healing**
Wounds may fail to heal and split (dehisce) because of poor blood supply in the skin, infection or bleeding complications. This may require a change in dressing management. Sometimes deep stitches become exposed. Occasionally further surgery is required.

**Stiffness**
Can result from the direct effects of surgery, which causes deep scarring. It is made more likely by complications, which cause swelling, pain and delayed mobilisation, which is vital to maintain tendon glide and joint mobility.

**Scar**
All scars remain firm to touch and tender for some months. This can be helped by firm massage once healed. Occasionally swellings develop under the scar (dermoid) due to a little fragment of skin being buried. This requires later removal with a minor operation.

**Damage**
Any structure in the vicinity of an operation can be cut, burned, scraped or bruised by surgical instruments. Damage to the small nerves running in the region can cause a small area of numbness or more rarely a painful spot in the scar (neuroma). Damage to major nerves, blood vessels or tendon is very rare and would cause numbness and loss of movement, necessitating a further operation for repair.

**Regional pain**
Any operation or injury can cause the hand to become generally swollen, painful and stiff. This problem occurs in about 5% of cases and cannot be predicted. Milder cases merely slow progress and settle. Severe cases are fortunately very rare but can cause permanent dysfunction in the whole limb.