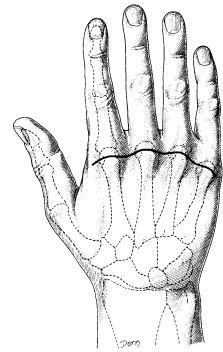


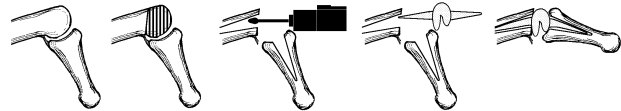
SWANSON ARTHROPLASTY

Rheumatoid arthritis causes stiffness and deformity in the hand, particularly affecting the knuckles (metacarpo-phalangeal joints, MCPJ). The contributing factors are (i) damage to the joints themselves, (ii) loosening of the joint ligaments, (iii) contraction of the local (intrinsic) muscles and (iv) malalignment of the (extensor) tendons that straighten the fingers.

The operation is performed under regional anaesthetic (arm numbed) with a variable amount of sedation or general anaesthetic. It involves a single incision across the knuckles to allow (i) replacement of the joints with artificial silicone implants and straightening of the fingers by (ii) tightening or reconstruction of the ligaments (iii) release of the tight intrinsic muscles and (iv) realignment and/or transfer of the extensor tendons.



Your hand will be initially placed in a bulky dressing that includes a rigid splint to both position and rest the fingers. One or more small tubes (drain) will be left in the wound to allow any blood to escape.



After the operation, the hand will be kept elevated to prevent swelling and stiffness of the fingers. Once discharged, please remember not to walk with your hand dangling, or to sit with your hand held in your lap.

The dressing and drains will be removed after 24-72 hours and replaced by a light dressing to allow mobilisation of the fingers. At this time, you will see the Occupational Therapist who will fit you with splints: **dynamic for day-time**, which allows movement of the fingers whilst protecting the tendon surgery with elastic supports; **static for sleep**, which rests the hand. You will be instructed on your exercise program and discharged when progress is satisfactory.

You will be reviewed at two weeks when your stitches will be dissolving. You will then be shown some new passive exercises (using the other hand to help with movements). After four weeks, you will start using the hand without the protection of a splint during the day-time but keeping the static splint for the night. After eight weeks, you should be returning to most normal activities and driving although you will be advised about how to avoid overstressing the joints (joint protection).

The wound will be left open as soon as possible. There obviously will be some swelling and bruising. Look out for any redness or tenderness in the area around the wound that might indicate an infection. Do not apply antiseptic but please contact my secretary if you have any worries. Once dressings are removed, it is safe to get the hand wet in a bath or shower. The wound and the surrounding skin can become dry and if this occurs, briefly immerse the whole hand in water to which a small quantity of baby-oil has been added. Moisturisers (e.g. E45, Diprobase creams) can be used on the hand but avoid rubbing them directly into the wound at this stage. However, once healed, the scar may become somewhat firm to touch and tender and then firm massage with the moisturizing cream to the scar and surrounding area is helpful.

After the operation, movement in the joints averages 45° which is less than half that of a healthy joint. In general, complications are rare (overall 5%) and outcomes are satisfactory. Inevitably, the implants will not last forever and sometimes they need to be replaced. There can be a tendency for the fingers to become deviated again over the years. Complications to be aware of include: -

Wound Possible problems include swelling, bruising, bleeding, blood collection under the wound (haematoma), infection and splitting of the wound (dehiscence, 3%).

Infection Deep infections may not respond to antibiotics and may require removal of the implant (1%).

Tendon Tendons are occasionally accidentally cut and would be repaired (3%).

Fracture Breakage of the implant becomes more likely with time but does not necessarily cause problems (1% per year).

Bone wear Absorption of bone around the implant related to loosening (3%).

Dislocation The implant can slip out of position or become unstable. Again, this does not necessarily cause problems (1%).

Silicone Spread of silicone particles into the lymph glands causing enlargement (0.1%).

Synovitis Inflammation of the joint lining due to fragmentation of the implant (0.05%).

Removal The implant is removed if significant problems are encountered (see above). They can be replaced if needed later (3%).

Regional pain syndrome About 5% (1 in 20) of people are sensitive to hand surgery and their hand may become swollen, painful and stiff after the operation. This problem cannot be predicted, is variable in severity and is principally treated with physiotherapy.