

FINGER ARTHROPLASTY

One or more of your interphalangeal joints (IPJ) has been replaced by an implant (arthroplasty). The general issues of choice of operation and implant for your arthritis have already been covered in a separate "finger arthritis" sheet. The aim of the operation is to relieve pain whilst retaining some but not normal movement.

These pictures show the operation occurring in a thumb joint from the dorsal/posterior approach; (a) the incision, (b) exposure of the joint, (c) removal of the bone ends, (d) insertion of a pyrocarbon (Ascension) implant and (e) X-Ray appearance.

The operation takes about 45 minutes. It will generally be performed under regional anaesthetic (arm numb) or general anaesthetic (asleep) but can occur as a day-case (home on the day of surgery).

Your finger and/or hand will be placed in a bulky dressing which includes a plaster to protect the operation until the swelling has settled. Hand elevation is important for comfort and to limit swelling.

The Hand Therapist will remove the dressing after several days. You will be provided with a splint and begin mobilisation. The exact rehabilitation programme advised will vary somewhat depending on (i) the technique used, (ii) the type of implant, (iii) the strength of bone and soft tissue repairs and (iv) how stable the joint felt at surgery.

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. Two weeks after surgery, your stitches will be removed.

You will probably be able to return to light use and driving at about six weeks after surgery. However, the implant will need some protection from knocks and stresses by the splint until the tissues have recovered full strength at about twelve weeks. Timing of your return to work is variable according to your progress and occupation, and you should discuss this.

Arthroplasty is a technically demanding procedure with a fairly high complication rate that can lead to revision, most often in the form of an arthrodesis (fusion) rather than replacement of the implant.

Wound Parts of the wound can break down and be slow to heal.

Infection This is indicated by the appearance of redness around the wound. This is a serious problem with this operation and must be reported to a doctor quickly. Deep infections may not respond to antibiotics and may require removal of the implant.

Tendon Tendons are often deliberately and occasionally accidentally cut but are repaired.

Numbness The digital nerves can be accidentally bruised particularly from the palm/anterior approach. Even if repaired some numbness would persist.

Stiffness Normal movement will not occur and the average range of movement at the joint is 60°. Occasionally, secondary surgery is needed to improve movement (tenolysis).

Instability The joint can be sloppy and dislocate either needing its relocation or revision.

Failure Absorption of bone around the implant related to loosening becomes more likely with time.

Synovitis Microscopic fragmentation of the implant can lead to recurrent swelling and pain.

