

FINGER ARTHRITIS

Damage of a finger joint causes swelling, pain, stiffness and deformity all of which interfere with use of the hand. There are several causes.

Trauma where the smooth joint surfaces have been damaged by injury or infection and then have worn.

Osteoarthritis where the joint surfaces have decayed.

Inflammatory arthritis where the joint surfaces have or are being attacked by synovial cells that line them in "auto-immune" conditions such as rheumatoid arthritis.

Treatment

The methods for relieving pain in an arthritic joint include (i) activity modification, (ii) pain killers, (iii) splints, (iv) steroid injections and (v) surgery.

Surgery is the only definitive treatment for persistent problems but no operation restores normal function. There are a number of operations available to your surgeon but the choice is complex. The factors that are considered when selecting the best procedure for you include (i) the cause of the arthritis, (ii) the extent of the joint damage, (iii) the condition of the bone, (iv) previous surgery, (v) the demands placed on the hand, (vi) the finger(s) affected, (vii) the condition of other joints in the hand

Synovectomy applicable only to early cases of inflammatory arthritis where there is considerable swelling (synovitis). It is suitable only if the joint is reasonably mobile and if the joint surfaces have not been badly damaged. This has become a rarer operation as drug treatment of inflammatory arthritis improves.

Arthroplasty involves removal of the joint and its replacement by one of a number of implants. It is most suited to a reasonably stable and mobile but painful joint in patients who do not need high power levels for work or play.

The new ceramic implants are suited to post-traumatic arthritis and osteoarthritis where bone is tough and demand on the hand is medium. They are not suitable if the joint is badly damaged or unstable. These probably offer better mobility but the average range of movement is 60°

The older silicone rubber joints are generally used in patients with inflammatory arthritis where bones are weaker and demand is low. Their design can compensate for more joint damage and instability due to soft tissue damage.

Arthrodesis (fusion) involves removal of the joint and joining of the two bones together by either metal wires or screws. The joint is generally set in a slightly bent position for best function. Although the operation abolishes movement at this (and only this) joint, the resulting fusion is very tough. This option is chosen when (i) joints are badly damaged (ii) there is already little movement, (iii) there is damage to nearby ligaments and tendons (iv) a previous arthroplasty has failed and (v) when heavy manual use is anticipated.

Rehabilitation

Activity will be restricted for a minimum of twelve weeks after most of these operations at which time bones have usually united and soft tissues have recovered normal strength. Your surgeon or therapist will, however, modify splinting and exercises depending on your progress.

Splints are made to rest and protect the operation as well as to maintain alignment and position. These should be removed to allow wound care and for exercise of the joint after synovectomy or implant. Arthrodesed joints are not intended to be moved and will be protected until united. The splint can generally be removed when sitting quietly but should always be worn at night or when the hand is liable to be knocked or strained.

Exercise is necessary to maintain mobility in neighbouring joints and to recover movement in joints after synovectomy or arthroplasty. Initially these are limited to "active" unresisted movements and later stepped up to gentle resisted and only occasionally "passive" exercises.

