

## **LIMITED WRIST FUSION: Triscaphoid or STT fusion**

STT fusion is an operation for wrist pain. Fusion of the joint between the scaphoid, trapezoid, and trapezium (the STT joint) is used to reduce pain in patients with localized osteoarthritis.

STT joint arthritis is characterised by pain on the radial (thumb) side of the wrist, often made worse by radial and ulnar (side-to-side) wrist deviation. It is not the operation of choice for thumb base osteoarthritis (CMC joint osteoarthritis).

At surgery the 3 wrist bones are fused using a bone graft from the patient's distal radius (the larger of the two forearm bones). The graft is harvested using a second transverse incision about two centimetres proximal to the wrist. Care is taken during surgery to retract the thin and vulnerable dorsal branches of the radial nerve.

The scaphoid bone is fused at about 55-60° of flexion, a 4mm space is preserved between the distal pole of the scaphoid and the trapezoid and trapezium, this space is tightly packed with bone graft to preserve the overall height of the three bone complex. The fusion is held with two or three wires (1mm thick) which pass across the site of fusion.

Surgery is under a general anaesthetic, patient usually stays in hospital for one night after surgery. A padded plaster supported above elbow bandage is used for one week, this is then changed to an above elbow light weight cast for a further three weeks. At four weeks after surgery this is changed to a below elbow cast. At six weeks the wrist is x-rayed again, if there are signs of bone union the pins are moved under local anaesthetic in the treatment room. If the x-ray shows potential for further improvement, then the pins are left in place for a further two weeks.

Post-operative consultations will be arranged with Mr Ian Grant usually at one, four, six weeks, and twelve weeks after surgery.