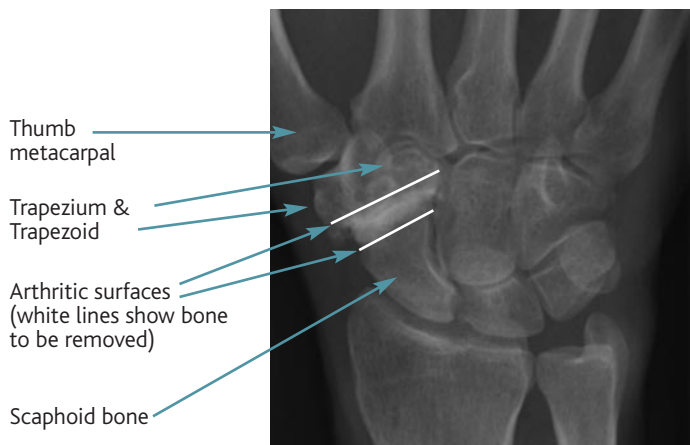




SURGERY

STT Arthritis Surgery



X-Ray to show STT Resection Arthroplasty

What does this involve?

The STT joint is really a set of small joints on the thumb side of the wrist (see picture below). The three bones involved in the joint are the Scaphoid, the Trapezium, and the Trapezoid, hence STT joint.

Various operations for STT arthritis have been described. In each case the arthritic joint surfaces from the three bones are removed. The two commonest options after the joint surfaces have been removed are just leaving the remaining bones free to move (resection arthroplasty) or fusing the remaining bones together (see 'Partial Wrist Fusions'). This sheet will concentrate on resection arthroplasty.

When is surgery needed?

This operation is performed to relieve pain in an arthritic joint. Most surgeons would encourage you to try painkillers, splints, activity modification, aids to help with certain tasks (opening jars etc) and sometimes steroid injections into the painful joint before recommending surgery. The majority of patients with this pattern of arthritis can manage their symptoms in this way without ever needing an operation.

Which operation is the right one for me?

Resection arthroplasty can give good relief from STT arthritis in the right patient. It won't give you back a completely normal wrist however.

Resection arthroplasty should only be performed if there is no evidence of the rest of the wrist starting to collapse (mid-carpal instability). This can be assessed on x-rays and in theatre. If the mid-carpal joint is already collapsing a resection arthroplasty will increase that problem and would be likely to lead to arthritis appearing rapidly elsewhere in the wrist. In this circumstance a fusion of the STT joint might be a better option.

Your surgeon will run through which of the options for arthritis at this site is best for your individual case.

Type of Operation	Day case
Length of Procedure	1 hour
Anaesthesia	Regional Anaesthetic (whole arm numb) or General Anaesthetic (asleep)



What are the main risks of this operation?

Swelling, Stiffness and Scar pain

This can be reduced by keeping the arm elevated and moving all the free joints as soon as possible. In most people the general swelling reduces dramatically in the first week after the operation.

Local swelling around the surgical site can persist for several months. Local swelling can be helped by massaging the tissues and this may also improve any irritability in the surgical scar.

Loss of wrist and thumb joint movement can occur after this surgery but is more noticeable after fusion than resection. Studies suggest an average of 70-80% of the starting range of up and down wrist motion is kept after an STT joint fusion.

Occasionally patients are troubled by more swelling and stiffness than average. In this case Complex Regional Pain Syndrome (CRPS) is sometimes the cause (see relevant information sheet in 'Conditions we Treat'). Severe CRPS occurs in less than 1% of cases.

Infection

This is unusual in the hand (less than 1% of cases). Local wound infections can often be treated with oral antibiotics. Rare, deep seated infections may require re-admission to hospital, antibiotics into the vein and occasionally more surgery.

Nerve Damage

The nerves most at risk with these operations are the branches of the superficial radial nerve (supplying sensation on the back of the thumb, index and middle fingers) The lost patch of skin sensation from these injuries might be irritating but should not affect how your hand works.

Failure of bone fusion

If an STT fusion is chosen there is a chance that the bones will only join together very slowly or not at all (non-union). The risk of this has been reported as about 6%. If the bones do not join together the joint can remain painful and any metalwork used to hold the bones together can start to work loose after some time. In either of these two cases further surgery might be necessary.

Metalwork problems

Temporary metalwork to hold a fusion (pins) will always need to be removed 8 – 12 weeks after the first operation. Plates and screws or staple fixation can be left in permanently but sometimes require removal at this site as they can irritate the surrounding tissues.

Residual thumb base discomfort

No operation for STT arthritis is perfect. Some patients will still have some discomfort at the base of the thumb with any of the operations for this condition. In most cases the pre-operative pain is much reduced and the residual symptoms are a manageable nuisance only. Occasionally the symptoms are so marked as to require further surgery.

Arthritis in the remaining joints

Further deterioration in the remaining joints in the wrist can occur after either of these operations. Further surgery might be necessary if this gives significant trouble.

Post Operative Course

Day 1 - 14

- A dressing and padded bandage with a plaster support incorporated is applied after the operation
- Keep the dressings clean and dry
- Keep the arm elevated in a sling or on pillows to reduce swelling
- Start moving all the joints that are not immobilised as soon as possible to prevent stiffness
- Take painkillers before the anaesthetic wears off and as necessary thereafter

Two Weeks

- An appointment will be made for a wound check, dressing change, removal of sutures (if needed)
- For patients having had a STT joint fusion a further plaster will be applied at this stage. Continue to exercise the non-immobilised joints.
- For patients having had a resection arthroplasty rehabilitation will start from a removable splint with the hand therapists

6 Weeks

- A review in clinic will be arranged.
- For resection arthroplasty patients rehabilitation will continue with addition of strengthening exercises.
- For STT fusion patients a check x-ray will be obtained to assess how well the bones are fusing. Plans for removal of any temporary metalwork will be made. Rehabilitation from a removable splint will start if staples or plates and screws have been used to fix the fusion.

8 - 12 Weeks

- Temporary metalwork fixation will be removed with another short operation.
- Rehabilitation will start, from a removable splint, with the hand therapists after this operation.

1 Year

- Improvements in motion and strength may continue up to a year after this sort of surgery.

Plaster Cast Information

Contact your surgical centre if:

- Your fingers become blue, swollen or numb and tingling with a plaster cast in place
- You see any discharge, wetness or detect any unpleasant smells from around your cast
- The cast becomes cracked, soft, loose or uncomfortable.

Outside normal working hours you may need to attend your local Accident and Emergency Department for help with these issues.

Driving

You may drive when you feel confident to control the car, even in an emergency. It is usually 2 months before patients feel able to re-introduce driving after this surgery. You should discuss it with your insurer if you are considering driving with a splint or cast in place.

Time off Work

This will vary depending on the nature of your job. Sick notes can be provided on the day of your operation, at your clinic visits and by your own GP.