



SURGERY

Volar Plate Release

What does this involve?

The volar (or palmar) plate is a piece of smooth fibrocartilage (similar to the tissue you can feel between the skin of your ear) that sits on the front of each of your finger joints. It acts as one of the stabilisers of the joint. A 'volar plate release' is a cut made in this tissue to allow the finger to bend and straighten better.

When is this surgery needed?

You can see from the diagrams below the soft tissues on the front of each finger are very precisely arranged to allow normal motion. Any injury (stretches, sprains, dislocations, breaks or surgery) will damage the soft tissues to a greater or lesser extent. As the damaged soft tissues heal they have a tendency to thicken up becoming less supple and flexible. In addition scar tissue forms which may cause surfaces that normally glide past each other to become attached to each other.

These attachments are called adhesions. Both of these processes can limit the movement of the fingers.

With minor injuries you just notice a slight stiffness for a few weeks that gradually wears off as you use the finger normally.

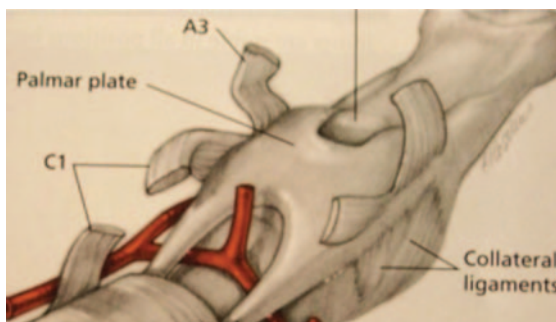
With more significant injuries stiffness can be a real problem. If you are not aware of the importance of stretching scar tissue as it forms, or are unable to perform these early stretching exercises (for instance whilst a broken bone is healing), the scar tissue can become very tough.

Your hand therapist will try and help you with these exercises. After around 6 months the scar tissue can become so tough that stretching alone no longer improves the flexibility of the scar tissue. If you still have a very stiff finger after that time an operation to release this scar tissue may be considered.

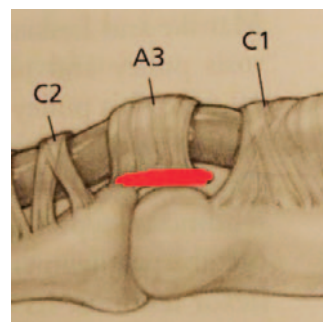
Front view of a finger to show the position of the volar plate from the outside



Front view of joint with palmar plate labelled (same as volar plate)



Side view of joint with volar plate highlighted in red



Type of Operation

Day case

Length of Procedure

0.5 – 1 hour (depending on how much scar tissue needs to be released)

Anaesthesia

Local or Regional Anaesthetic



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.

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

There might be a small patch of numbness next to the scar after this surgery. The nerves to the tip of the finger/thumb are close to the tendons but injury to these nerves is very unlikely if your surgery is undertaken by an experienced hand surgeon.

Adhesions/recurrent stiffness

Even with your best efforts and the help of the hand therapists, stiffness and adhesions can recur after surgery. Further surgery may be required in some cases.

Post Operative Course

Day 1 – 14

- A dressing 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

10 – 14 Days

- An appointment will be made for you to see the hand therapy team
- They will check your wound and start further rehabilitation.

3 Months

- By this stage most people will have returned to most activities.
- Hand therapy will continue if needed.

Driving

You may drive when you feel confident to control the car, even in an emergency. For this surgery it can be up to two months before many people feel this confident. The Hand Therapy team will discuss this with you in more detail.

You should discuss it with your insurer if you are considering driving with a splint 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.