How does it happen?

A volar plate injury occurs when the middle joint on your finger is over straightened and bent backwards the wrong way. The volar plate is a small piece of thick fibrous cartilage over the palm side of the middle joint (phalanx) on your finger. This structure helps to support the middle joint of your finger and prevents it being able to over straighten or dislocate. It can be partially or fully torn and can also pull off a small piece of bone when it is damaged.

This common injury is often diagnosed by physical examination with or without an X-ray. It can be caused by ball sports, falls, and catching your fingers during other activities of daily living.

There are varying degrees of volar plate injury:

- sprain (where the volar plate is stretched or some fibres are torn)
- rupture (where the volar plate is completely torn)
- avulsion fracture (where the volar plate is torn away from the bone, sometimes with a piece of bone).

What are the symptoms?

A volar plate injury is often painful, swollen and bruised around the middle joint on the injured finger. The finger’s range of movement can decrease due to the pain and swelling.

How is it treated?

For mild sprains, you may be given strapping to support the injured finger against an adjoining finger. However, it has been decided that your injury requires splinting. A small finger splint will be made for you to wear to keep the middle joint on your injured finger in a slightly bent position for a few weeks. This allows the injured volar plate time to heal. It is very important that you wear the splint at all times. If you do not follow this advice the volar plate will not heal properly and you could be left with the middle joint on your injured finger being more likely to be re-injured again in the future.
What do I do with the splint?

- you must wear your splint at all times.
- you must keep your finger and splint dry. If your finger becomes wet, your skin will turn white, become wrinkled and the skin may become sore.
- it is important that you do not stick your finger out but let it rest in line with the other fingers.
- if there are any problems with your splint you must contact your hand therapist for your splint to be checked.

How to remove and replace your splint

We are happy for you to remove your splint 1-2 times a day to gently wash and freshen up your finger.
1. Begin by gently undoing the Velcro straps on the splint and removing it from your injured finger
2. Keep all your fingers slightly bent
3. Wash your hand under a fresh running tap or in a bowl of warm soapy water and then ensure your hand is really dry and check your skin for any red marks or sores
4. Secure the splint back on your finger by re-sticking the velcro straps and making sure the finger is comfortably resting in it.

Elevation

For the first two weeks after your injury it is very important that you keep your hand above the level of your heart to help reduce any swelling.

Exercises

This is an important part of your treatment as it will prevent your finger becoming stiff.

1). Support the middle joint of the finger you are exercising with the other hand
Slowly bend the tip of your finger, then straighten
Note: the joint below the one you are exercising should not bend during the exercise.

2). Undo the top strap on the splint and support the lower knuckle on the injured finger with your other hand
Slowly bend the middle joint of the finger you are exercising, then straighten
Note: the knuckles should remain straight throughout this exercise
3).
Gently curl your fingers into the palm making a fist

Then straighten all your fingers back out to the start position

Do up the top strap on the splint.

**What do I do if my finger becomes more painful?**

Your finger may become painful if:

- it becomes swollen
- your splint or Velcro straps become too tight.

If your finger becomes more painful it may be because of swelling. You should try to keep your hand above the level of your heart. If the pain continues you should contact the therapist in the Plastic Outpatient Department in normal working hours, or the staff on Odstock ward at night or the weekend.

**Attending the hospital for therapy support**

You will need to come to the hospital to see a therapist for your finger to be checked. How often you need to attend will depend on how your finger is reacting to the injury and to ensure that the splint is fitting properly. This level of support is necessary to help you to get the best result.

**Can I work, play sport or drive?**

You will be able to do most light everyday activities with your splint on. Our advice for driving is that it is your responsibility to ensure you are safe to drive with your splint on and you must inform your insurance company. You may be able to work with your splint on, but this will depend on your job. Please liaise with your therapist for further advice if unsure.

You should not do any sporting activities as this may cause your splint to come off and you will damage your finger again.

**Recovery time**

A volar plate injury can take a number of weeks to heal. Just how long varies from person to person depending on the severity of injury. You may still be receiving treatment for 2 - 3 months. However, your recovery will be discussed between you and your therapist.

If you have any concerns please contact:

Plastics Outpatients Therapy Department on: 01722 345530 during normal working hours and Odstock Ward: 01722 336262 ext. 3507 at other times.