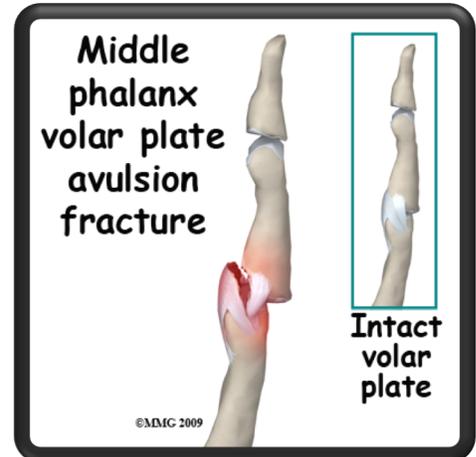


# Volar plate injuries

## Introduction

A volar plate injury occurs when the middle joint on your finger is over stretched by a backwards force on the finger. It is a common injury often caused by ball sports, falls, and catching your fingers during other activities of daily living. The volar plate is a small piece of thick fibrous cartilage on the front of the middle joint of your finger. This structure helps support the joint and prevents it being able to over stretched or dislocated. It can be either partially or fully torn, and in some instances also pull off a small piece of bone when it is damaged.

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



## Treatment



For mild sprains, you may be given strapping to support the injured finger against an adjoining finger ("neighbour strapping" or "buddy strapping", pictures A and B). Often these injuries require a custom-made splint ("dorsal block splint", picture C) to protect the joint from further injury while it heals. 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 should be worn 24 -hours a day. The position of the splint may be altered by your hand therapist over a period of weeks, but it may be required for up to 6 weeks.

It is very important that you wear the splint at all times. If you do not follow this advice, the volar plate may not heal properly and you could be left with the middle joint on your injured finger being stiff, unstable, painful or weak in the future, as well as being prone to arthritis.

## How to care for your finger whilst in the splint

- Keep your finger and splint dry. If your finger becomes wet, the skin may become sore.
- Try and relax your finger and let it rest in line with the other fingers.
- If there are any problems with your splint contact your hand therapist for your splint to be checked.
- Do not attempt to over-straighten the finger
- Do not carry out heavy tasks or contact sports
- Continue to maintain movement of your other fingers and use your hand for light activities.

## How to remove and replace your splint

Remove your splint twice a day to gently wash your finger. This reduce problems with the skin becoming sore and irritable.

- Undo the Velcro straps on the splint and gently remove it from your injured finger
- Keep all your fingers slightly bent
- Wash your hand under a running tap with soapy water and then dry thoroughly
- Check your skin for any red marks or sore areas
- Reattach the splint back on your finger with the velcro straps and making sure the finger is comfortable.

## Swelling

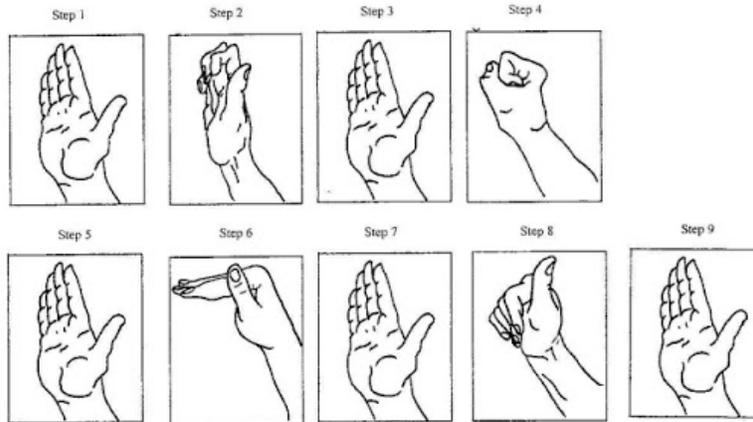
It is important that you keep your hand elevated (above the level of your heart) to help reduce any swelling.

## Hand Therapy

It is important that you move the finger regularly to reduce swelling and increase the range of movement. This injury is very susceptible to stiffness

PATIENT INFORMATION LEAFLET

## Exercises (“buddy strapping”)



## Exercises (“dorsal block splint”)



Supporting the top joint bend and straighten the finger as far as you can in each direction



Undo the top strap and bend the middle joint as far as you can in each direction within the limits of the splint



Gently bend the finger and curl into a fist with the other fingers.

Once you have been advised that it is safe to remove the splint (6 weeks) you should commence the same exercises given above to those people who have been treated in strapping.

## How long will I be off work and when can I drive?

Please liaise with your treating clinician for further advice if unsure. It is your responsibility to ensure you are safe to drive with your splint on and we advise you to discuss the matter with your insurance provider. In general, before returning to driving, we recommend that you are able to make a full pain free fist, be able to grip the steering wheel and perform an emergency stop manoeuvre without any distracting pain.

You will be able to do most everyday activities with your splint or strapping on. You may be able to work with your splint on, but this will depend on your job. You should not start any sporting activities until you are told by your treating clinician it is safe to do so or you may further damage your finger.

## Complications

Most volar plate injuries heal without any complications. Associated fractures involving a joint may have a greater tendency to become stiff. The following complications may also occur:

- Chronic swelling – extremely common
- Flexion contracture
- Joint stiffness
- Instability or recurrent dislocation
- Post traumatic arthritis
- A pain syndrome



## PATIENT INFORMATION LEAFLET

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### Further information

The day surgery unit can be contacted on 02476 966861 / 02476 966868 (University Hospital), or on 01788 663264 (Hospital of St. Cross). For further information please visit our hand service's web site at [www.tinyurl.com/uhcwhand](http://www.tinyurl.com/uhcwhand), or contact:

- Hand Therapy at University Hospital Coventry & Warwickshire on 02476 966016
- Hand Therapy at Hospital of St. Cross, Rugby on 01788 663257
- Our specialist hand surgery nurse / hand-coordinator on 02476 965072

The Trust has access to interpreting and translation services. If you need this information in another language or format please contact 02476 966861 and we will do our best to meet your needs.

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#### Document History

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