

Finger volar plate injury (jammed finger): exercises and advice

What is the volar plate of the finger?

It is a structure on the palm side of your finger at the second joint down from the tip. It prevents the joint bending backwards and consists of a tough plate made from fibrocartilage and a thinner section which allows the finger to bend.

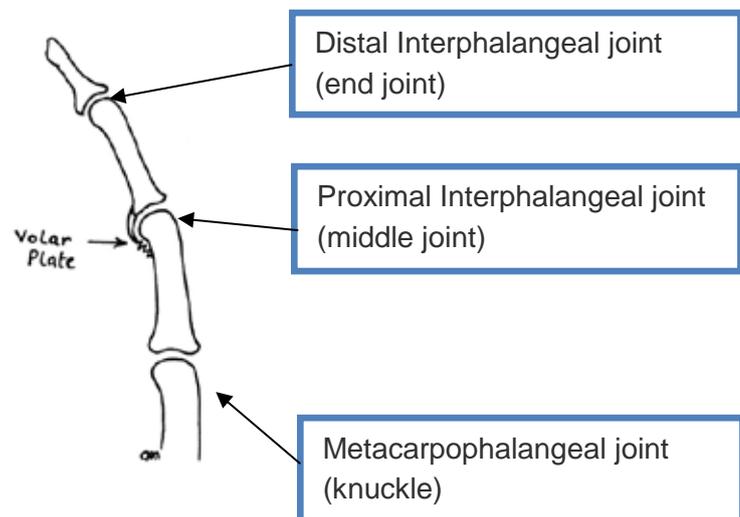


Diagram of a finger bones and joints

How is the volar plate injured?

It is usually from an impact, such as a ball, hitting the tip of the finger and pushing the joint backwards. This stretches the volar plate and can even cause a small fracture at the base of the middle bone of the finger. The volar plate can also be injured if the joint dislocates.

What symptoms does this injury cause?

It is painful at the time of impact, although it is often possible to complete a game if it occurs during sport. The finger swells and there is often bruising on the palm side of the finger at the second joint.

How is it managed?

If you attend the Emergency Department (A&E), an X-ray may be taken and your finger assessed. There may be a small fracture at the base of the second bone (middle phalanx). If the joint is dislocated, it will be put back (reduced) by the A&E team.

Your finger will be buddy-taped to the next finger and you will be allowed to move the finger as pain allows. Occasionally, the finger needs to be splinted.

Your X-ray will be reviewed by the Virtual Fracture Clinic along with how the injury occurred. You will then be contacted by the VFC nurse, who will advise you on treatment.

We recommend buddy-taping as the first line of treatment for volar plate injuries, if there are no complicating factors. Complicating factors include a large fracture, joint instability or other injury. Sometimes, the finger may need to be splinted in a bent position for three weeks by the hand therapists.

How do I apply buddy taping?

Buddy strapping protects your injured finger or hand while allowing you to move it to prevent stiffness. This is done by strapping your finger to the adjacent one. You will be advised which fingers to strap together.

The strapping needs to be secure so that it keeps both fingers together as you bend and straighten them but not so tight as to cause an increase in your swelling or to cut off your circulation. If your finger starts to change colour or you get pins and needles which you did not have previously then loosen the strapping.

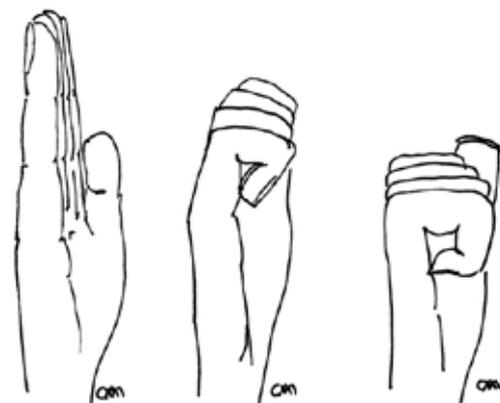
The strapping should be applied as in the picture, between the finger creases so you can bend and straighten the joints. You may need to cut your tape in half lengthways to make it narrow enough to stop it from blocking your movement. A piece of soft gauze can be placed between the fingers to absorb any sweat and to stop them from getting sore by rubbing. You can change the strapping daily to freshen up your hand. Reapply the strapping immediately after you have done this.

For the first 2-3 weeks wear buddy taping continuously. Once the swelling has settled and the pain subsides only use tape if there is a risk the finger might get caught (i.e. on public transport), otherwise leave the tape off and mobilize the finger.



What exercises should I be doing?

In the first couple of weeks, the aim is to reduce the swelling by keeping in the hand higher than the heart and moving the finger as pain allows. Once the pain and swelling start to settle, remove the taping and progress on to the exercises shown below right;



If your fingers are still stiff after 6 weeks, then progress to the following exercises:

<p>Bend each of your fingers in turn towards your palm and hold for 3 seconds.</p>	
<p>With the other hand, push each finger towards your palm and hold for 3 seconds.</p>	
<p>Make a fist and hold for 3 seconds</p>	

Things to look out for

If you find you are unable to bend your finger, or are unable to fully straighten your finger three weeks after injury, please contact us. It is possible for the volar plate injury to cause a tightening of the volar plate, which can reduce the movement in the finger. This is usually treated with hand therapy and splints, but can occasionally require surgery.

How long does it take to recover?

It can take longer than might be expected. Most simple volar plate injuries return to normal function after a few months. The joint swelling can take months to settle and even in the long term, may not return to pre-injury size. Rings may need adjusting. Although most fingers return to full movement and function, it is possible that the joint may become stiff. This can be permanent.

When can I return to work?

This depends on the work that you do. For office work, it is when you are comfortable enough. You should avoid anything which makes your finger uncomfortable. For manual work requiring use of all fingers, it may be up to 6 weeks.

When can I return to driving?

You should not drive while you are in a thermoplastic splint. After this you can drive when you are able to control your vehicle without distraction. This is your decision, you can discuss this with your doctor or physiotherapist if you are unsure. You must be safe and in control of the vehicle. The law is very clear that you have to be able to prove to the police that you are 'safe' to drive, so it is entirely your own responsibility and we cannot give you permission to drive.

When can I return to sport?

It can take 6 weeks before your hand is healed enough to return to play. You should only return to contact sport 12 weeks after your injury.

Contact information

If you require any information or advice from the Hand Therapy Team, you can contact us at the Royal Berkshire Hospital during office hours Monday to Friday via the Clinical Administration Team on: 0118 322 1885.

Further information

More information is available on the Trust website: www.royalberkshire.nhs.uk

- www.readinghandsurgery.com
- Versus Arthritis www.versusarthritis.org. As well as funding research, Versus Arthritis produce a range of free information booklets and leaflets.
- Arthritis Care www.arthritiscare.org.uk
- The Royal College of Surgeons of England have some patient information publications available on their website www.rcseng.ac.uk/patient_information

This document can be made available in other languages and formats upon request.

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