

Proximal Interphalangeal (PIP) Joint / Volar plate injury

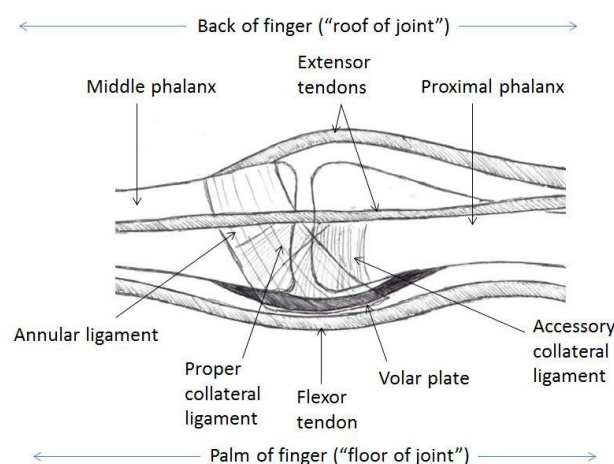
This leaflet offers more information for patients with an injury to the PIP joint. If you have any further questions or concerns, please speak to the staff member in charge of your care.

What is a PIP joint/volar plate injury?

The PIP joint is the middle joint of each of your fingers. It is a highly complex joint with many soft tissue structures surrounding the bones which enable your finger to move. It is commonly damaged during falls and ball sports.

The common structures which are most damaged in the PIP joint include:

- the **volar plate ligament** (the “floor” of the joint)
- the **collateral ligaments** (the “walls” of the joint).



Ligaments are tough bands of connective tissue that support the joint and prevent it from dislocating

What are the signs and symptoms of injury?

A PIP joint injury is often painful, swollen and bruised around the joint. Movement in the finger may be decreased due to the pain and swelling.

If the PIP joint has been dislocated, it will appear deformed.

A PIP joint injury can be graded as one of the following:

- **Sprain** – where the ligament(s) are stretched or some of the fibres are torn.
- **Rupture** – where the ligament(s) are completely torn.
- **Avulsion fracture (volar plate injury)** – where the ligament is torn away from the bone, taking a small fragment of the bone with it.

How is a PIP joint/volar plate injury diagnosed?

Your doctor, nurse practitioner or hand therapist will talk to you about your medical history and then perform a physical examination. You may need an x-ray to check if the bone is broken in addition to the damaged ligaments. The treating clinician will also assess your finger movement, swelling and pain to confirm diagnosis. No other tests are normally required.

How is a PIP joint/volar plate injury treated?

Most injuries can be managed conservatively (without surgery) and recover well. A period of splinting or taping (using a support to stop the finger from moving) may be needed to protect the joint and prevent reinjury. You may also need exercises to prevent the finger from becoming stiff.

Splinting/strapping

In cases where the injury is only a minor sprain and the ligaments are assessed to be intact, all that may be required is for the affected finger to be strapped to the finger next to it for the finger to heal. This is called “buddy strapping”.

Buddy straps allow the injured finger to move freely but with the protection of its healthy neighbouring finger to prevent re-injury. You will be provided with buddy straps either by a doctor, nurse practitioner or hand therapist, as well as advice on how much or when to wear them.

Swelling

Swelling (oedema) is the body’s natural response to injury. It is important to minimise swelling, as this will optimise your healing and movement. Swelling can take a number of months to fully resolve. You can help decrease swelling by lifting your hand above the level of your heart as much as possible when you are resting.

Exercises

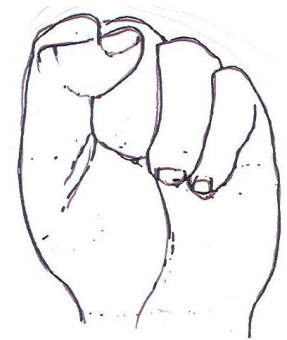
It is important to exercise your finger(s) to prevent stiffness and improve healing. Please follow the exercise information below. Only do the exercises prescribed and do not over exercise.



Keep the main knuckles of your fingers straight; bend the top and middle joints of each finger together. Bring



Start with your fingers straight, then curl the tips of your fingers down to form a ‘flat fist’ onto your palm. Bring your fingers back up to straight.



Aim to make the best fist you can with your fingers; bring your fingers back to straight.

- Try to do each movement 5 times and hold for 5 seconds
- Move slowly and gently and do not force your fingers
- Try to do these exercises 3 times a day

Return to work, sport and other activities

PIP joint/volar plate injuries normally take 12 weeks to start to feel more normal and pain free when using your hand day-to-day.

You should avoid carrying and lifting heavy objects for at least six weeks and you can resume moderate activities after around eight weeks. For contact sports such as rugby or intensive activities such as rock climbing or windsurfing, you should wait up to 12 weeks before re-commencing these types of activities.

You can decide when to drive again. However, you should feel confident you can control your car safely in case of an emergency. Usually, this is between 4 and 6 weeks after injury.

Your return to work depends on the type of work you do and how flexible your job or employer are. If you need a fit note (Statement of Fitness to Work) this can be provided by the surgeons, hand therapist or your GP.

What can I expect from my recovery?

Injuries to the PIP joint can take a surprisingly long time to heal. Most simple injuries will return to normal function after a few months, however, in some cases, you may experience more permanent stiffness and pain. Any joint movement that is lost tends to be minor and does not usually require further treatment.

Pain should improve on a weekly basis. It tends to be present when using the hand for 3-4 months after injury. Some people experience occasional pain for up to a year, but this is rare and tends to be associated with heavier activities or colder temperatures. The swelling can take up to six months to settle and can delay the joint's return to full movement.

At three months after the injury most patients will have regained near full movement and strength and will not experience significant issues in their day-to-day life. A small proportion of people may not have a fully straight finger. However, this is usually very mild and does not affect function.

As the damaged structures heal, they create scar tissue which can cause the joint to be larger than before. Because of this, you may find that rings do not fit following injury. The scar tissue takes at least a year to settle and there is a chance that the joint may not return to its normal size. It is therefore recommended that you do not have rings resized for at least one year following your injury.

Who can I contact for further information?

If you have any questions or concerns, please discuss them with your doctor, nurse practitioner or hand therapist at your clinic appointment.

Alternatively, you can contact the hand unit on **020 8725 4770** (Monday to Friday, 8.30am to 5pm).

For urgent advice outside of these hours, please contact the on-call plastic surgeon by calling the switchboard on **020 8672 1255** and asking for bleep number **7050**.

If you are still having difficulties with movement or pain beyond six weeks OR if you sustain an injury to the same finger, please contact the hand unit on the above number to arrange further follow-up.

Additional services

Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough wings (near the lift foyer).

Tel: 020 8725 2453 **Email:** pals@stgeorges.nhs.uk

NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.

Web: www.nhs.uk

NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones. **Tel:** 111

AccessAble

You can download accessibility guides for all our services by searching 'St George's Hospital' on the AccessAble website (www.accessable.co.uk). The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.