Proximal Inter-Phalangeal (PIP) Joint Injury

This leaflet offers more information about injuries to the proximal inter-phalangeal (PIP) joint. If you have further questions or concerns, please speak to the staff member in charge of your care.

What is the proximal inter-phalangeal (PIP) joint?
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 to enable your finger to move. It is commonly damaged during falls and ball sports.

The common structures to damage in the PIP joint include the volar plate ligament (the “floor” of the joint) and 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. The finger’s range of movement can decrease due to the pain and swelling.

If the PIP joint has been dislocated, it will appear deformed. Sometimes the force of a dislocation can cause the skin to burst open on the palm side of the joint, but this is rare.

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** – where the ligament is torn away from the bone, taking a fragment of the bone with it.

Do I need any tests to confirm diagnosis?
You may need an x-ray to check if the bone is broken in addition to the damaged ligaments. The treating doctors or therapist will also assess your finger movement, swelling and pain to confirm diagnosis.
What treatments are available?

**Buddy straps**
In cases where the injury is only a minor sprain, and the ligaments are assessed to be intact and working well, then strapping the affected finger to the finger next to it may be all that is necessary 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 neighbour finger to prevent re-injury.

You will be provided with buddy straps either by a doctor or a therapist, as well as advice as to how much or when to wear them.

**Splint**
A thermoplastic splint (supporting device) may be made for you in order to protect the joint and enable the structures around the joint to heal.

You should wear the splint as directed and not take it off unless directed to do so by your therapist. If the splint doesn’t fit, rubs or causes you discomfort or pain, please contact your hand therapist as soon as possible. Do not try to alter the splint yourself.

Keep the splint dry at all times. Your hand therapist will help with tips on this. If your finger does get wet, change the splint lining as soon as possible.

Your therapist will adjust the splint regularly and review movement. You should take care not to get the splint hot or wet. The splint must be worn as follows:

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**Swelling**
Swelling (oedema) is the body’s natural response to injury. It is important to minimise swelling as much as possible, as this will optimise your healing and movement. You can do this by keeping your hand elevated as much as possible.

Instructions for managing your swelling:
Exercises
It is important to exercise your finger(s) to prevent stiffness and improve healing. However, you should not over exercise as this may cause more damage to the joint.

The exercises you need to do will be provided separately by your therapist, including how often to complete them in the day.

Surgery
In severe cases, injury to the PIP joint can cause significant instability. In this case, the surgeon or nurse practitioner may recommend an operation to repair the damaged structures. A period of splinting and hand therapy will be needed after surgery.

Your surgeon or nurse practitioner will discuss the details with you and answer any questions.

What happens if I do not get treatment?
If you do not get treatment for a PIP joint injury, the finger may remain stiff and swollen and in the long term it may not regain full movement.

What can I expect from my recovery?
PIP joint injuries can take a surprisingly long time to heal. Most simple injuries will return to normal function after a few months, however more severe or complex injuries can cause some permanent stiffness and pain. Any joint movement that is lost tends to be minor and does not require further treatment.

The swelling can take up to six months to settle and can delay the joint’s return to full movement. It is therefore essential that you follow your therapist’s advice on reducing it in the early stages.

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.

Contact us
If you have any questions or concerns about the information provided in this leaflet, please feel free to discuss them with your therapist at your next appointment. For more urgent queries the team can be contacted on the treatment enquiries phone number listed below.

Your therapist’s name is: _____________________________________

Treatment enquiries: 020 8725 1038 (answer phone only)
Appointments: 020 8725 0007
For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.stgeorges.nhs.uk

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 of 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.