

Phalangeal Injury (Hand)

Hand injuries are quite common in sporting events, especially in those athletes who play ball games or contact sports. Most of these injuries are closed hand injuries. It seems to be increasingly evident that these injuries of the hand can end up causing long-term pain and disability if the individual doesn't recognize the problem and get it treated at an early stage.

Hand injuries are often treated using adequate alignment, immobilization and then movement. Bone injuries in the hand are quite common. Even though they are often viewed as trivial injuries, poorly treated finger fractures can have a significant amount of consequences. The injury might result in stiffness, deformity and chronic pain, which prevents individuals from being able to participate in regular daily activities. Accurately diagnosing and treating the condition in a timely fashion is the main staple to hand care.

Hand and wrist injuries can be complicated to heal, with simple strains and sprains taking several months to get better. Patients often report that the injury takes longer than expected to heal. Finger tendons and ligaments can easily be sprained from an impact or fall. During a fall, it's often possible to tear the collateral ligament and dislocate the finger.

Phalangeal Injury (Hand) Anatomy

The anatomy within the hand is quite complex, fascinating and intricate. Its integrity is imperative for individuals to be able to go through life on a regular basis and engage in normal activities. Hands can be affected by any number of disorders, but often from a traumatic injury.

Multiple small joints work together to allow movement in the hand. This provides you with the fine movement needed for threading a needle or tying a shoelace. The hand is composed of 27 different bones, eight make up the wrist, 14 make up the bones in the fingers and the remaining five make up the bones in the palm of the hand.

At the side of every phalanx are two collateral ligaments that support the joint. If this ligament is sprained or torn, the finger joint may dislocate.

How to Treat a Phalangeal Injury (Hand):

1. Non-Surgical Treatment

Most of the time, the patient themselves will be able to put the dislocation back by simply pulling or moving the finger to the correct position. If there is a fracture, the doctor will be able to put the broken bone back into position without having to perform surgery. A cast or splint will hold the finger straight and help protect it from additional injury during the healing process. The fractured finger is often splinted to the one next to it that isn't injured to help provide it with additional support. You will be advised how long you are going to need to wear the splint. Most of the time, the splint is worn for about three weeks. X-rays will be taken over the weeks to make sure the finger is healing properly.

2. Surgery

Depending on how severe the injury is and the type of injury sustained, surgery might be needed to put the bones back into alignment. Pins, wire, screws and other hardware is often used to keep the fractured bones in place to promote the healing process.

3. Therapy

Following surgery, you may need to see a specialist hand therapist or your own local sports injury therapist. Your therapist will advise which exercises to do. Mobility exercises are important early exercises as the fingers tends to be unable to fully straighten or bend following a sprain, strain or dislocation. Gently doing the relevant finger exercise every day will help to improve the range of mobility.

Tips:

- Slamming your finger in the door is one of the most common means of sustaining a phalangeal injury.
- When falling, avoid placing your hand out in front of you to try and catch yourself, as that is one means of sustaining an injury.
- If you are trying to catch a ball, exercise caution to make sure you don't jam your finger in the process.
- Doing regular rehabilitation exercises will help to reduce any swelling and stiffness in the fingers.
- Contrast bathing (using a combination of ice/heat, or cold water/hot water) can be beneficial to reduce swelling and increase blood flow.

