

FINGER FRACTURE (Phalangeal)



■ ■ ■ Description

A phalangeal fracture is a broken bone (fracture) in the finger. One or more of the finger bones may be fractured. The fracture may occur in one of the joints of the fingers or not involve a joint.

■ ■ ■ Common Signs and Symptoms

- Severe pain at the fracture site at the time of injury
- Pain, tenderness, swelling, and later bruising of the finger and later the hand
- Visible deformity if the fracture is complete and the bone fragments separate enough to distort normal body contours
- Numbness or coldness from swelling in the finger causing pressure on the blood vessels or nerves (uncommon)

■ ■ ■ Causes

Direct blow or indirect stress on the finger.

■ ■ ■ Risk Increases With

- Participation in contact sports such as football or rugby
- Sports such as soccer, baseball, or basketball
- Sports that require hitting, such as boxing and martial arts
- History of bone or joint disease, including osteoporosis, or previous immobilization
- Poor physical conditioning (strength and flexibility)

■ ■ ■ Preventive Measures

- For participation in contact sports, wear appropriate protective equipment and ensure proper fit for the hand.
- Use proper technique when hitting, punching, and landing after a fall.
- If you have had a previous finger injury or hand immobilization, use tape or padding to protect the finger when participating in sports in which finger injury is likely.

■ ■ ■ Expected Outcome

With appropriate treatment and normal alignment of the bones, healing can be expected, usually in 4 to 6 weeks. Occasionally, surgery is necessary.

■ ■ ■ Possible Complications

- Nonunion (fracture does not heal) or malunion (heals in a bad position, including twisted fingers)
- Chronic pain, stiffness, or swelling of the hand
- Excessive bleeding, causing pressure on nerves and blood vessels
- Unstable or arthritic joint following repeated injury or delayed treatment
- Arrest of normal growth in children
- Infection in open fractures (skin broken over fracture) or at the incision or pin sites if surgery was necessary
- Shortening of injured bones

- Bony prominence or loss of contour of the fingers
- Arthritic or stiff finger joint if the fracture goes into the joint

■ ■ ■ General Treatment Considerations

If the bones are in appropriate alignment (position), the initial treatment consists of ice and elevation of the injured hand at or above heart level to reduce swelling. Pain medications help to relieve pain. Immobilization by splinting, bandaging, casting, or bracing for 4 or more weeks is usually recommended to protect the bones while they heal. For fractures that are displaced (out of alignment), involve more than one bone, or involve a joint and are displaced, surgery is usually recommended. Surgery usually involves placement of removable pins, screws, and occasionally plates. After immobilization (with or without surgery), stretching and strengthening of the injured and weakened joint and surrounding muscles (due to the injury and the immobilization) are necessary. These may be done with or without the assistance of an occupational or physical therapist or athletic trainer. Occasionally, depending on the sport and position played, taping or a splint may be recommended initially when returning to sports.

■ ■ ■ Medication

- Nonsteroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take within 7 days before surgery), or other minor pain relievers, such as acetaminophen, are often recommended. Take these as directed by your physician. Contact your physician immediately if any bleeding, stomach upset, or signs of an allergic reaction occur.
- Strong pain relievers may be prescribed as necessary. Use only as directed and only as much as you need.

■ ■ ■ Cold Therapy

- Cold is used to relieve pain and reduce inflammation. Cold should be applied for 10 to 15 minutes every 2 to 3 hours for inflammation and pain. Use ice packs or an ice massage.

■ ■ ■ Notify Our Office If

- Pain, tenderness, or swelling worsens despite treatment
- You experience pain, numbness, or coldness in the hand
- Blue, gray, or dusky color appears in the fingernails
- Any of the following occur after surgery: fever, increased pain, swelling, redness, drainage, or bleeding in the surgical area
- New, unexplained symptoms develop (drugs used in treatment may produce side effects)



Figure 1

Notes:

(Up to 4400 characters only)

Notes and suggestions