

## Scaphoid Fracture

*“Working with a knowledgeable hand therapist can make the difference between success and failure in complex hand surgical cases. The therapist extends the continuum of our care, as well as functioning as coach and trainer for our patients.”*

*Marybeth Ezaki, MD, Past President, American Society for Surgery of the Hand*

### What is a scaphoid fracture?

The scaphoid is one of the eight small bones in the wrist called carpal bones. It is located below the thumb and is the most commonly fractured (broken) carpal bone. Some areas of the scaphoid have poor blood supply and may have difficulty healing.



*The scaphoid (in red) is the most commonly fractured carpal bone*

### What are the symptoms of a scaphoid fracture?

Common symptoms include pain with movement of the wrist or thumb. A person may experience difficulty pinching or holding items. The thumb side of the wrist may be tender to pressure. There may also be swelling and bruising at the base of the thumb and wrist. Sometimes there is only mild pain, and the injury is mistaken for a wrist sprain.

### What causes a scaphoid fracture?

A scaphoid fracture is usually caused by a fall on an outstretched hand with the wrist bent backward. It can also be caused by a direct hit to the wrist, such as in a car accident or contact sport. It is most common in active young adults.

### What is the treatment for a scaphoid fracture?

If a scaphoid fracture is suspected, an X-ray of the wrist will be taken; however, sometimes the fracture is not seen right away. If nothing is seen on an X-ray, the wrist may be placed in a cast or orthosis and then X-rayed again in two to three weeks. An MRI may also be used for diagnosis. Some fractures require immobilization in a cast or orthosis for eight weeks up to six months. The cast will include the wrist and thumb and may also include the elbow. The fingers are free to move. More complicated fractures require surgery to realign and stabilize the bone fragments.

### What can a hand therapist do for me?

A hand therapist may fabricate a custom orthosis to immobilize the wrist and thumb to protect the healing bone. The therapist will also educate the patient on how to reduce pain and swelling in the hand. When the cast is removed, therapy will focus on regaining motion, strength and functional use of the wrist and hand.



*Example of an orthosis to protect the healing bone after a scaphoid fracture*