



SCAPHOID FRACTURE

WHAT IS THE SCAPHOID?

The scaphoid is a small bone situated in the wrist, located on the thumb side. If completing the 'thumbs up' gesture, the scaphoid is located in between the two visible tendons at the end of the thumb, otherwise known as the snuffbox.



CAUSES OF INJURY:

The major cause of the scaphoid fracture is falling on outstretched hand (FOOSH), where the body weight is taken through the palm resulting in a fracture of the bone.

INJURY FACTS:

Fractures of the scaphoid are a complicated injury and correct diagnosis is imperative for recovery. The reason for its complexity is the poor blood supply to the scaphoid. Depending on the location of the fracture, this blood supply may be restricted therefore leaving areas of the bone compromised to avascular necrosis (bone dying) if diagnosed incorrectly.

RISK FACTORS:

- Smokers
- Poor diet, lacking calcium
- Osteoporotic and osteopaenic persons
- Lack of wrist guard protection worn e.g. during snowboarding

SIGNS AND SYMPTOMS:

- Pain and swelling at the base of the thumb
- Pain on gripping
- Decreased grip strength
- Localised tenderness on palpation of the area
- Pain on thumb and/or wrist movements

HEALING GUIDELINES:

Non displaced fractures close to the thumb tend to heal well with immobilisation in 6 weeks. The injured person will normally be placed in a below elbow cast that may or may not include the thumb.



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Non-displaced fractures closer to the wrist tend to be slower healing. They often require immobilisation with a cast that includes the thumb and often goes above the elbow. Healing times may be 6-12 weeks.

Displaced fractures will require surgery which may include screws and wires to hold the fracture together. Following surgery the injured person will often be splinted for 6-8 weeks and monitored over a 6-12 month period.

PHYSIOTHERAPY TREATMENT OPTIONS:

- Splinting or casting;
- Guidelines on correct management;
- Joint mobilisation techniques;
- Strengthening programs;
- Dry needling;
- Soft tissue therapy;
- Electrotherapy.



DIAGNOSIS:

The physiotherapist will complete a subjective history to better understand your reporting history including symptoms and pain behaviours. The physiotherapist will observe for any swelling or deformity and review thumb and wrist movements. The physiotherapist will palpate the scaphoid for any localised tenderness and may complete other special tests as needed.

If there is any suspicion of a scaphoid fracture, the injured person will be sent off for X-rays and possible MRI or CT scan and placed in a splint or cast. Follow up X-ray will occur usually 7-10 days post injury, as fractures are often delayed in showing up. Specialist review may also be required during the early stages for more complicated fractures.

WHEN THINGS GO WRONG:

If a Scaphoid fracture is missed, incorrectly diagnosed or treated it may result in long term wrist instability, pain consequently leading to early arthritis. Non-union can often occur which is where the fracture site doesn't heal together leaving the area compromised and surgery may be required if conservative treatment doesn't work.