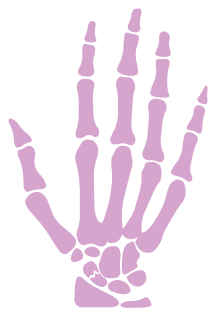
5 facts about physiotherapy and scaphoid fracture

1 Scaphoid fracture location determines management



The location and severity of the fracture can affect the outcomes as follows:

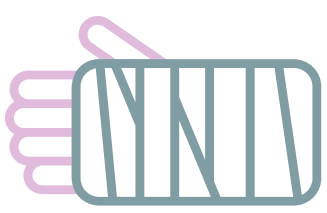
- a high risk of poor outcomes including non-union, malunion, scaphoid non-union advanced collapse, and avascular necrosis occurs with displaced waist fractures, bicortical fractures and proximal pole fractures
- avascular necrosis is a complication of waist and proximal pole scaphoid fractures following disruption of the vascular supply.

2 Early diagnosis of scaphoid fracture helps avoid complications

Missed or delayed diagnosis is a significant contributing factor to complications:

- 20–30 per cent of scaphoid fractures don't show up on X-ray
- MRI or CT can be used as a secondary imaging option if patient history suggests scaphoid fracture but X-ray finding is negative.

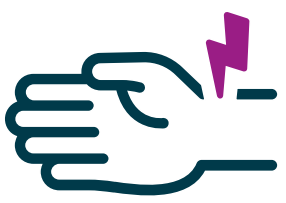
3 Determining instability is crucial for scaphoid fracture treatment



The Mayo classification system for scaphoid fractures and its appendix outlining factors contributing to instability can help to determine whether surgery will be required:

- non- or minimally displaced fractures at the waist can be treated using a short arm, non-removable fibreglass/plaster cast (neutral wrist, thumb out) for six weeks, followed by graduated rehabilitation
- almost all proximal pole fractures and unstable scaphoid fracture patterns at any location require surgery, while almost all distal pole fractures are managed in a cast.

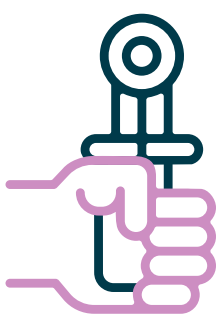
4 Persistent pain may indicate delayed scaphoid union



Where persistent pain over the fracture site is present, a CT scan is performed to assess bony union:

- union of a scaphoid fracture is defined as having trabeculae across 50 per cent of the fracture line
- persistent pain may also represent a scapholunate ligament injury
- anatomical snuffbox tenderness may be present for years following a united scaphoid fracture.

5 Scaphoid rehabilitation is graduated and tailored



Rehabilitation following cast removal lasts for 6–12 weeks depending on the functional requirements of the patient. Rehabilitation goals include:

- near full active range of motion, strength, power and endurance
- nil or minimal tenderness on palpation of the anatomical snuffbox
- return to work for manual workers and return to sport once sufficient range of motion and grip strength has been achieved.