

## Hand Therapy for Tendon Injuries in the Hand and Wrist

Tendons are the connective tissues that attach muscles to bones. Tendon injuries in hand and wrist are often deep lacerations that cause inability of the tendon to function to move its respective body part.

Tendon injuries are often caused by trauma (e.g. workplace accidents, accidents with sharp knives).

Without proper rehabilitation, the repaired tendon is at risk of scar adhesion and suture rupture. This results in complications such as tendon inflammation, stiffness, decreased mobility and function. The ruptured tendon may then have to undergo a secondary repair.

Early treatment and rehabilitation supports safe mobility of the injured tendon while ensuring that the healing process of the injured tendon is optimised. This has been shown to result in good functional outcomes.

## How is it treated?

Occupational Therapists play a supporting role to the medical surgeons in tendon repairs of the hand and wrist. Depending on the severity of the tendon injury and surgical technique used, the surgeons will relay specific information and rehabilitation protocols to the Occupational Therapists. The wound nurses also play an important role in ensuring good wound and scar healing.

## What does rehabilitation involve?

The main aim of the treatment is to promote early mobility of the injured tendon while supporting an optimal healing process, thereby regaining function of the hand and wrist.

Occupational Therapists will fabricate a splint to restrict specific movements of the affected area. A protocol is followed strictly to guide the therapy interventions and process. Treatments then progress to rehabilitative approaches involving specific finger and wrist exercises. When necessary, heat and ultrasound modalities are used for scar management to reduce scar adhesions and promote mobility of the injured tendon.

The clinical team will make a referral to Occupational Therapy with a specific therapy protocol. Occupational Therapists will then do a brief assessment on current function and movement (as appropriate) before introducing the therapy regime. Future treatment plans and goals of therapy will then be set together with the patient. Patients are scheduled for regular follow-up appointments to monitor possible complications and ensure good healing progress.