

Tendon Injury

Summary

Tendons connect muscle and bone. Most of the muscles for the hand are in the forearm, with the tendons passing the wrist and attaching at various points in the fingers and thumb, making them move. Treatment depends on whether the injury is open or closed and its location. To get optimal results recovery should be closely supervised with a hand therapist.

Treatment

Tendons are most commonly injured when they are cut. **Complete tendon injuries** are obvious as you won't be able to flex or extend your finger normally. They **need to be repaired**. Injuries also occur with excessive force, pulling the tendon off the bone. X-rays should be done in this situation as the tendon can avulse a fragment of bone.

Partial injuries are difficult to diagnose as dysfunction only becomes obvious after a number of days or even weeks. Delayed rupture leads to abrupt dysfunction and will likely be obvious. Alternatively, a partial injury may lead to imbalance of the flexor and extensor mechanism over time and lead to a delay in seeking medical attention. **These types of injuries are often missed**, even by experienced GPs and emergency doctors. The most common example of this is when the central part of the extensor tendon is cut as it inserts into the middle bone of the finger. Early the rest of the tendon compensates, but as the balance is lost you may lose the ability to fully straighten the proximal interphalangeal (PIP) joint. Eventually a boutonniere deformity develops which can be difficult to reverse.

To get optimal results tendon repairs should be closely supervised with a hand therapist. Minor injuries may simply be debrided when enough tendon substance remains. A splint is not required and you can return to normal activities sooner. Partial injuries may need surgery or close supervision and immobilisation to prevent deformity and dysfunction in the future. Protection of repairs and partial injuries is often needed for ≥ 8 weeks, with normal activities resuming at 12 weeks when tendons are expected to be back at full strength.

