

# Elbow Tendon and Ligament Repair



## Elbow Anatomy

The elbow is a complex joint of the upper limb formed by the articulation of the long bone of the upper arm or humerus and the two bones of the forearm, namely, radius and ulna. It is one of the important joints of the upper limb and is involved in basic movements such as flexion and extension of the upper limb and rotation of the forearm.

The elbow joint is supported by the ulnar collateral ligament, radial collateral ligament, and the annular ligament. These ligaments provide stability and strength to the elbow joint.

The elbow joint also has the attachment of the common flexor and common extensor tendons. These groups of muscle assist in rotational movement of the forearm as well as the movements of the wrist and hand.

## Elbow Injuries

The common conditions affecting the tendons around the elbow joint include tennis elbow and golfer's elbow, which result from an overuse injury to the tendons in weight lifting, or from repetitive activities during sports or occupation.

The ligaments around the elbow may be injured secondary to a sprain, rupture, trauma or any accident. The sprain or trauma may result from repetitive stress, overuse or a direct injury.

## Symptoms of Elbow Injuries

The common symptoms of injury to the elbow joint and its surrounding structures include swelling and pain, which may extend from the elbow to the forearm and palm and be aggravated by movements of the wrist. Sometimes, instability of the joint may also be seen.

- Elbow Tendon and Ligament Repair Procedure
- Tendon repair

The repair of the damaged tendon is broadly classified into two types:

### Tendon debridement

This procedure is commonly used in the management of tendinitis. In this procedure, your surgeon removes any damaged tissue and cleans the tendon.

### Tendon release

It is the most commonly used surgery for tendon repair. In this procedure, your surgeon locates the attachment of the extensor or flexor tendon on the elbow and splits the damaged tendon, as well as removes the scar tissue or other overgrowths around the tendon. Sometimes, the loose end of the tendon may be sutured to the surrounding connective tissue (fascia).

## Ligament Reconstruction

Ligament reconstruction is considered to treat ligament rupture. Your surgeon will make an incision over the elbow. Care is taken to move muscles, tendons, and nerves out of the way. The donor's tendon is harvested from either the forearm or below the knee. Your surgeon drills holes into the bones of the upper arm and the forearm, around the elbow joint. The donor's tendon is inserted through the drilled holes in a pattern like that of the original ligament complex. The tendon is then attached to the bone surfaces with special sutures.

The incision is closed with sutures and covered with sterile dressings. A splint is applied to support the elbow for a few weeks. After the surgery, you may be advised for regular follow-up and a rehabilitation programme for a quicker recovery.

## Complications of Elbow Tendon and Ligament Repair

The common complications of the elbow ligament and tendon repair surgeries include infection, injury to the adjacent nerves and blood vessels, and a loss of strength or flexibility of the elbow joint.

## Rehabilitation after Elbow Tendon and Ligament Repair

The success of the surgery depends on the postoperative rehabilitation programme which includes the use of a removable splint immediately after surgery as well as ice therapy, electrical stimulation, and massage for reducing pain, swelling or muscle spasm. Isometric exercises, strengthening, and range of motion exercises may be useful for long-term rehabilitation.