

Elbow Dislocation and Fracture

When the surfaces of the joint become separated in the elbow, dislocation occurs. Dislocations can be partial or complete. In the event of a complete dislocation, the surfaces are separated entirely. Partial dislocations only have part of the joint separated. A partial dislocation is referred to as subluxation. Sometimes the elbow will fracture and as a result of the fracture it will also dislocate.

Elbow Dislocation and Fracture Anatomy

Three bones joint together to complete the elbow joint. The bone in the upper part of the arm is referred to as the humerus. Two bones from the forearm come together to make up the lower elbow part of the arm. All of the bones have a distinct shape. Ligaments that are connected to the bones work to keep everything in proper alignment.

The elbow is a ball-and-socket joint and hinge joint and a hinge joint. As the muscles relax and contract, two distinct motions occur in the elbow. Bending happens through the hinge joint that lets the elbow straighten and bend, which is known as extension and flexion. The elbow also allows you to turn your palm up and down, known as supination and pronation.



Fracture and dislocation typically occurs after serious trauma, high speed impact, or severe falls. It requires immediate care from a hospital so the elbow can be relocated.



How to Treat an Elbow Dislocation and Fracture:

1. Reduction Maneuver

Normal alignment of the elbow is often restored at the emergency department of a hospital. Before this can be completed, pain medication and sedatives are often given. Restoring alignment to the elbow is done with a reduction maneuver. It is completed slowly and gently. Two people are often required for completion of the maneuver.

2. Splints and Immobilization

Simple dislocations are often treated by using a splint and immobilizing the elbow by using a sling for a couple weeks. If the elbow is immobilized for an extended time period, the ability to move your elbow can become limited. Physical therapy works wonders during this timeframe.

3. Physical Therapy

Certain situations occur where the individual won't be able to extend their arm fully, even with physical therapy. The elbow can work quite well without having complete range of movement. Once the motion improves, a strengthening program can be implemented. X-rays are taken to make sure that the bones of the joint return to their proper alignment.

4. Surgery

When it comes to a complex dislocation of the elbow, surgery might be the only option to restore alignment and repair the ligaments surrounding the bone. It can be quite difficult to realign the dislocation and get the joint to remain in line. After surgery, the elbow will be protected using an external hinge. If the nerve injuries and blood vessels are linked to the dislocation, surgery can help to repair the nerves and blood vessels, as well as the ligaments and bone injuries.

Tips:

- An elbow dislocation often occurs when an individual falls onto their hand when it is outstretched.
- Elbow dislocations often happen in car accidents where passengers will reach forward to prepare for the impact.
- Simple dislocations don't have major injuries to the bone but can tear ligaments.
- Severe dislocations involve an injury to the nerves and blood vessels traveling across the elbow.
- Complex dislocations have ligament and bone injuries attributed to them.
- Expect recovery to take between 12-18 months because stiffness will be very common after surgery or a cast. Work closely with your therapist to ensure you regain full range of movement to the elbow. At first you will be unable to bend or straighten the elbow, but with time the bend will come back but elbow straightening will still be challenging and require manual therapy.