Lateral Ulnar Collateral Ligament Ruptures (Posterolateral rotatory instability)

What is a Lateral Ulnar Collateral Ligament (LUCL) Rupture?

The lateral ulnar collateral ligament connects the ulna, a bone in the forearm, to the humerus or arm bone. Tears of this ligament are the leading cause of chronic elbow instability.

What causes a LUCL Tear?

Falls on an outstretched hand and elbow dislocations are common causes of LUCL tears. Other causes include fractures, genetically loose connective tissue, long term use of crutches, and injury during surgical procedures.

What are the symptoms?

Patients will describe pain and clicking, snapping, or locking of the elbow as the arm is straightened with the palm facing up.

How is a LUCL tear diagnosed?

Physical exam is the key to diagnosis. The surgeon will position the elbow above the patient's head and perform a maneuver designed to test the integrity of the ligament. If the elbow joint is felt to separate, or the patient's pain is reproduced then instability is present. X-rays are usually normal, but may show partial dislocation of the elbow in severe cases.

How is it treated?

Non-operative

Physical therapy to strengthen the muscles that support the elbow may be effective in low demand patients.

Operative

Reconstruction of the ligament is recommended using a graft taken from elsewhere in the arm. For acute tears, repair of the ligament, combined with a hinged external fixator may be used to hold the palm of the hand down, while allowing motion at the elbow joint.

Arthrex