

POSTEROLATERAL ROTATORY INSTABILITY OF THE ELBOW

DESCRIPTION

This is a sprain (tear) of one of the ligaments on the outer side of the elbow. The lateral ulnar collateral ligament (LUCL) is a structure that helps keep the normal relationship of the humerus (arm bone) and the radial head (one of the forearm bones). The two forearm bones maintain their relationship to each other. This problem occurs after elbow dislocation, falling on an outstretched arm, or surgery on the elbow. This ligament is rarely stressed in daily activities. It prevents the radial head from moving behind the humerus. When torn, this ligament usually does not heal or it may heal in a lengthened position (loose). This problem has only recently been recognized, identified and characterized. Still more information is being sought with regard to how often it occurs, how frequently it causes symptoms, and what happens if untreated. Sprains are classified into 3 grades: A *first degree* sprain, the ligament is not lengthened, but is painful. With a *second degree* sprain, the ligament is stretched but still functions. With a *third degree* sprain, the ligament is torn and does not function.

FREQUENT SIGNS AND SYMPTOMS

- Occasionally pain and tenderness on the outer side of the elbow
- Vague elbow pain
- Clicking, snapping, clunking, feeling of the bones of the elbow slipping out of joint and/or locking of the elbow especially when straightening the elbow and turning the palm upwards
- Recurrent elbow dislocation

CAUSES

Force that exceeds the strength to the ligament. This injury usually is the result of injury from elbow dislocation, fall on an outstretched arm or it may occur as a result of surgery for tennis elbow (lateral epicondylitis).

EXPECTED OUTCOME

If this problem causes symptoms, bracing or splinting may help. Surgery is often necessary to eliminate this problem.

POSSIBLE COMPLICATIONS

- Frequent recurrence of symptoms resulting in a chronic, repetitive problem.
- Healing time will be prolonged if not appropriately treated or if not given adequate time to heal
- Injury to other structures of the elbow, including the articular cartilage, resulting in arthritis of the elbow.
- Elbow stiffness with permanent limitation elbow motion
- Prolonged disability

GENERAL TREATMENT CONSIDERATIONS

Initial treatment consists of medications and ice to relieve pain and reduce the swelling of the elbow. Occasionally a splint, brace or cast may be recommended while the acute phase subsides. Later, rehabilitation to improve strength endurance and proper throwing mechanics is initiated. This may be carried out at home, though usually referral to a physical therapist or athletic trainer is recommended. Bracing to prevent full straightening of the elbow and/or prevent turning the palm up may be used for treatment. For those who have an acute rupture of the ligament or those who have failed therapy, surgical repair or reconstruction (rebuilding the ligament using other tissue) is recommended. After immobilization and/or surgery, strengthening and stretching of the injured and weakened joint and muscles (due to the injury and the immobilization) is necessary. This may be done with or without the assistance of a physical therapist or athletic trainer. Return to sports after surgery may take 6 months or more.

MEDICATION

- Non-steroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take if surgery planned in 7 days or less), or other minor pain relievers, such as acetaminophen, are often recommended. Take these as directed by your physician. Contact him/her immediately if any bleeding, stomach upset or an allergic reaction occurs.
- Stronger pain relievers may be prescribed as necessary by your physician. Use only as directed and only as much as you need.

HEAT AND COLD:

- Cold is used to relieve pain and reduce inflammation for acute and chronic cases. Cold should be applied for 10 - 15 minutes every 2-3 hours for inflammation and pain, and immediately after any activity which aggravates your symptoms. Use ice packs or an ice massage.
- Heat may be used prior to performing stretching and strengthening activities prescribed by your physician, physical therapist or athletic trainer. Use heat pack or a warm soak.

NOTIFY OUR OFFICE IF

- Symptoms get worse or do not improve in 4-6 weeks despite treatment
- You experience pain, numbness, or coldness in the hand
- Blue, gray or dusky color appears in the fingernails
- New, unexplained symptoms develop. Drugs used in treatment may produce side-effects.