

Little League Elbow

What is Little League Elbow?

Little league elbow is a growth plate injury on the medial, or inner aspect of the elbow. The growth plate, also called the medial epicondylar apophysis, is the attachment site for the group of muscles that flex the wrist and rotate the forearm palm down. Another name for this sports injury is medial epicondylar apophysitis. It occurs in children and teens involved in sports that require repetitive throwing motions.

What causes Little League Elbow?

Little league elbow is caused by repetitive throwing. More specifically, there are two phases of the throwing motion that stress the growth plate. The first is the early acceleration phase. During this phase of throwing there is a pulling, or traction force applied to the growth plate on the inner elbow. The second phase of the throwing motion that stresses the elbow is when the ball is released. During this phase, there is a powerful inward and downward snap of the wrist. The growth plate in the elbow is vulnerable to injury because it is made up growth cartilage, a relatively soft substance that is not as strong as bone, muscle or tendons. With repetitive throwing, and not enough rest between throwing activities, the growth cartilage weakens, begins to develop very small cracks and may actually pull apart from the arm bone, like a screw pulling out of a plaster wall.

What are the symptoms of Little League Elbow?

The most striking symptom little league elbow is pain at the inner elbow. The pain may be severe and occur abruptly after one hard throw, or it may occur gradually over the course of a season. There may also be swelling, redness and warmth over the inner elbow.



What should I do if I think I have Little League Elbow?

The first and most important thing to do if little league elbow is suspected is to stop throwing. Ice should be applied for 15 to 20 minutes, and the elbow can be wrapped with an elastic bandage or a compression sleeve. All young throwers with elbow pain should see a doctor since X-rays may be needed to determine the extent of the growth plate injury.

How is Little League Elbow treated?

Treatment for little league elbow depends on the extent of the growth plate injury. Usually, if caught early, there is minimal separation of the growth plate and it can be treated with rest, ice and compression wraps. The period of non-throwing may take 4 to 6 weeks to allow proper healing. Sometimes, if this sports injury is minor and caught early, an athlete will be allowed to bat or play an infield position such as first base. If the injury to the growth plate is more severe, or there is significant separation of the growth plate from the bone, casting may be necessary. On rare occasions, the injury is severe enough that surgical pinning is necessary to re-attach the growth plate fragment.

Once healing is complete, there will be a gradual return to throwing, usually during a two to three period. This consists of a functional progression--starting with very light throws from short-distances and progressing to 50 pitches from the mound. This is best directed by a sports medicine physician or sports physical therapist.

Does Little League Elbow cause permanent damage?

Usually not. If caught early and treated properly, little league elbow will heal completely, and there will be no long-term effects to the growth plate. On rare occasions, the cartilage will degenerate, become fragmented and break off inside the elbow joint, causing loose pieces that need to be surgically removed. This is more common on the lateral, or outside, of the elbow.

Can Little League Elbow be prevented?

There is no way to 100 percent guarantee that a young thrower will not develop little league elbow, but here are some ways to minimize the risk:

1. Always warm up before throwing.
2. Have a coach or parent count pitches. This is a much better and more accurate way to monitor stress on the elbow than counting innings.
3. Remember hard throws when not pitching (playing infield, throwing at home, pitching lessons, PE class, etc).
4. No curve balls or other breaking pitches until age 14 (or when the pitcher is shaving). Young pitchers should master control of the fastball and change-up before attempting to throw curve balls. The proper curve ball requires a large enough hand for finger placement across the top of the ball, so ball release does not put any stress on the wrist or elbow. Young pitcher's hands are too small for proper finger placement, and they must twist or torque the wrist and elbow to get the ball to rotate. This increases stress on the inner elbow growth plate.
5. At the first sign of elbow pain, stop throwing, and see your doctor for an evaluation.