

(Aleve®), or may prescribe medicine. For young athletes who can swallow pills, naproxen works well because it needs to be taken only twice a day (morning and night). It does not need to be taken during school or right before workouts. Ibuprofen should be taken three times a day. Anti-inflammatory medicine should be taken for 10 to 14 days to allow the medicine to build up to therapeutic levels in the body. Taking medicine infrequently allows the medicine levels to drop, which decreases its effectiveness.

Activity Modification: For Little League elbow, the period of nonthrowing may take four to six 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.

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The Children's Healthcare of Atlanta Sports Medicine program offers medical, orthopaedic and rehabilitation services for student athletes at the middle school, high school and elite levels.

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Little League Elbow

Little League elbow is an overuse growth plate injury of the inner elbow. The growth plate is the attachment site for the group of muscles that flex the wrist and rotate the forearm palm down. This sports injury occurs in children and teenagers involved in sports that require repetitive throwing motions.

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 is the point 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 of growth cartilage, a relatively soft substance that is not as strong as bone, muscle or tendon. 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.

The most striking symptom of 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 during the course of a season. There also may be swelling, redness and warmth over the inner elbow.

Are X-rays Necessary?

X-rays may be ordered by your child's doctor to



confirm the diagnosis or to exclude other problems. Often, the diagnosis is made based on the clinical information and the doctor's experience. X-rays are more likely to be ordered if there are factors raising the doctor's concern to other possible diagnoses.

What Can Be Done?

Treatment for Little League elbow depends on the extent of the growth plate injury. Little League elbow does not usually cause permanent damage. If caught early and treated properly, Little League elbow will heal completely, and there will be no long-term effects to the growth plate.

If the injury to the growth plate is more severe, or if 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 reattach the growth plate fragment.

Relief Treatments

Physical Therapy: During the healing process, physical therapy may be ordered by your doctor. The physical therapists will evaluate the athlete and provide instructions in proper exercises to assist with range of motion and strengthening. They also will analyze throwing mechanics and develop a gradual and safe functional throwing progression. This is best directed by a sports medicine physician, sports physical therapist or certified athletic trainer.

Once healing is complete, physical therapy may be ordered by your doctor to instruct the athlete about exercises for a gradual return to throwing, usually during a two- to three-week 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, sports physical therapist or certified athletic trainer.

Ice: Icing can be a very effective anti-inflammatory treatment. The best time to apply ice is immediately after a workout, such as the car ride home from the game or practice. One effective way to ice is to apply an ice cup massage. Fill several plastic foam cups with water and freeze them. When frozen, tear off 1 inch around the cup's rim to create a frozen snow cone. The ice should be applied directly to the sore area in a circular massaging motion until the area becomes numb, usually about 10 to 15 minutes. This type of massage can be repeated every 60 to 90 minutes, several times a day.

Medicine: Nonsteroidal anti-inflammatory drugs (NSAIDs) can be another effective treatment. Your doctor may suggest an over-the-counter medicine, such as ibuprofen (Motrin[®], Advil[®]) or naproxen