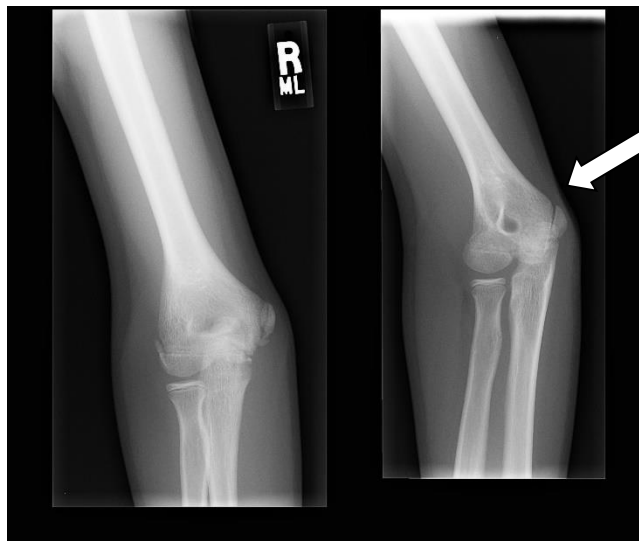


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Little Leaguer's Elbow
(Medial Epicondylar Apophysitis)

Little leaguer's elbow is characterized by inflammation of the growth plate of the inner elbow. The medial epicondylar growth plate of the elbow becomes inflamed due to repetitive injury from muscle contraction. The muscles that bend the wrist attach to the medial epicondyle. The growth plate is an area of relative weakness and injury to it occurs due to repeated stress or vigorous exercise. It is a temporary condition of the medial epicondyle that is uncommon after age 16.



Apophysitis of the Epicondyle
(widening at the growth plate)

Frequent Signs and Symptoms

- Slightly swollen, warm, and tender bump of the inner elbow
- Pain with activity, especially bending the wrist against force (curls, lifting, throwing) or following an extended period of vigorous exercise in an adolescent
- In more severe cases, pain during less vigorous activity
- Inability to throw at full speed
- Inability to fully straighten the elbow



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Etiology (Causes)

Little leaguer's elbow is caused by stress or injury to the medial epicondyle growth plate (which is still developing during adolescence) from overuse or fall. Repeated stress or injury interferes with development, causing inflammation.

Risk Factors

- Throwing sports such as baseball
- Overzealous conditioning routines, such as weightlifting
- Being overweight
- Boys between 11 and 18 years of age
- Rapid skeletal growth
- Poor physical conditioning (strength and flexibility)

Prevention

- Appropriately warm up and stretch before practice or competition.
- Maintain appropriate conditioning:
 - Arm, forearm, and wrist strength
 - Flexibility and endurance
 - Cardiovascular fitness
- Exercise moderately, avoiding extremes.
- Rest appropriately after vigorous exercise.
- Use proper technique.

Outcomes

Mild cases can be resolved with slight reduction of activity level, whereas moderate to severe cases may require significantly reduced activity for 3 to 4 months.

Potential Complications

- Bone infection
- Growth plate pulling off the arm bone resulting in a fracture
- Persistent inability to fully straighten the elbow



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Treatment Considerations

Initial treatment consists of medications and ice to relieve pain, stretching and strengthening exercises (particularly the muscles that bend the wrist), and modification of activities. Specifically, throwing and heavy lifting should be avoided. The exercises can all be carried out at home for acute cases. Chronic cases often require a referral to a physical therapist or athletic trainer for further evaluation or treatment. Surgery is rarely needed (if conservative treatment fails) in the growing patient; however, surgery is necessary if the growth plate separates completely and moves away from where it should be.

Possible Medications

- Nonsteroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take within 7 days before surgery), or other minor pain relievers, such as acetaminophen, are often recommended. Take these as directed by your physician. Contact your physician immediately if any bleeding, stomach upset, or signs of an allergic reaction occur.
- Corticosteroid injections are rarely, if ever, indicated. Corticosteroid injections may weaken tendons, so it is better to give the condition more time to heal than to use them.

Modalities (Heat and Cold)

- Cold is used to relieve pain and reduce inflammation for acute and chronic cases. Cold should be applied for 15 to 20 minutes every 2 to 3 hours for inflammation and pain and immediately after any activity that aggravates your symptoms. Use ice packs or an ice massage. Use a towel between the ice and your elbow to reduce the chance of injury to the ulnar nerve at the inner elbow.
- Heat may be used before performing stretching and strengthening activities prescribed by your physician, physical therapist, or athletic trainer. Use a heat pack or a warm soak.

Notify My Office If Symptoms Worsen

