

SPECIALISTS' CORNER



Plague of Little League Elbow; it starts at the shoulder!

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Baseball season is upon us and no matter the color of team you're cheering for, we all want our kids to stay safe playing baseball! Lots of media coverage occurs around baseball arm injuries, starting with youth teams through professional teams. This media coverage often doesn't portray the real pathology and plague that's happening with our young athletes.

We all know overuse injuries in youth athletes are on the rise. Numerous studies have proven that pitch counts and types of pitches directly affect the rate of upper extremity over use injuries in baseball pitchers. Coaches and parents of young baseball players should know these well. We also know that baseball players who play BOTH pitcher and catcher are at the highest risk of injuries. So don't be fooled, playing catcher is not "resting" from being a pitcher. Another position must be rotated through in order to get the needed rest, infield or outfield.

Little league elbow can be confusing as it's often used as a catch-all for any elbow pain in a skeletally immature baseball player. Helping define the exact pathology will help you treat and counsel the patient. Here's a couple diagnoses to remember when treating kids with elbow pain:

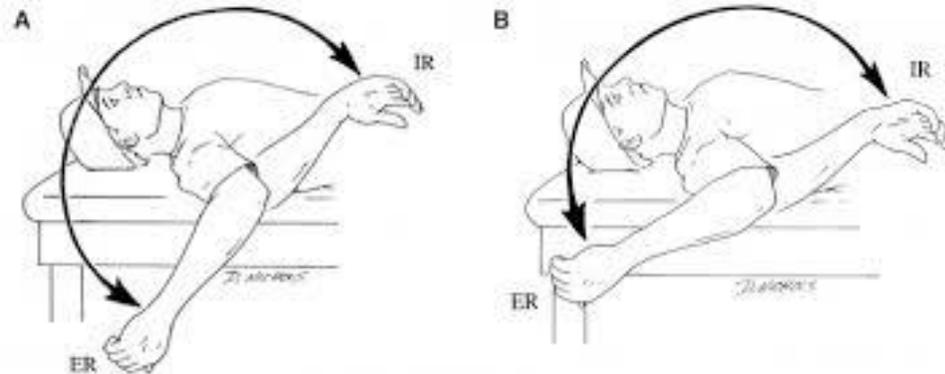
1. Medial epicondyle apophysitis: True little league elbow
2. Medial epicondylitis: Similar to Adults
3. Panner's Disease: lateral elbow pain on the capitellum with x-rays findings of diffuse capitellar ossification changes
4. Capitellar OCD: Focal bone and cartilage loss seen on x-rays and MRI
5. UCL tears: Dreaded Tom Johns Ligament. Very rare in youth baseball players.

Physical exam and basic elbow x-rays will help differentiate between these conditions. Sometimes contralateral elbow x-rays are needed to confirm widening/fragmentation of the medial epicondyle indicating a "sick" physis and true Little League Elbow.

Little League elbow is treated initially with rest, removal of aggravating activities, NSAIDs, and physical therapy. Remember that refraining from baseball while still playing lacrosse or any other overhead or throwing sport isn't resting the arm. It's absolute rest and recovery time. That

being said, numerous cases of Little League elbow can be persistent and recurrent. This is the time to evaluate the reason for the pathology.

Several studies have shown that skeletally immature patients who start playing baseball at a young age and play with a high frequency will have physical, anatomical adaptations to the shoulder as a result. Glenoid retroversion and decreased glenohumeral range of motion are two of the main adaptations. GIRD, Glenohumeral Internal Rotational Deficiency, is a common cause of recurrent, persistent elbow pathology in baseball players. It is frequent and easy to find if you know a simple physical exam maneuver.



<https://www.anatomy-physiotherapy.com/en/shoulder/articles/systems/musculoskeletal/upper-extremity/shoulder/shoulder-rotation-rom-and-strength-measurements>

With the patient supine, the examination table stabilizes the scapula. The shoulder is abducted to 90°. In this plane, External and Internal Rotation are evaluated. I recommend starting with the healthy shoulder to show the family how the Range of Motion is different. You will often find a true loss of Internal Rotation of the shoulder (the kids will try to cheat and move their scapula to avoid this) but also a true loss of arc or total Range of Motion. This restriction in ROM at the shoulder increases forces and effort across the elbow. The elbow itself can recover, but if the shoulder pathology isn't addressed, it will return as soon as the athlete goes back to pitching.

I urge you all to go out and test shoulder range of motion in your overhead athletes! You'll be amazing to see that the true plague is the shoulder... and not the elbow. Unlike the chicken and the egg, we have learned through research which one comes first!