LITTLE LEAGUE ELBOW  
MEDIAL EPICONDYLE STRESS INJURY/FRACTURE

The growing elbow has multiple growth centers that are particularly at risk for damage with repetitive throwing maneuvers and certain gymnastics maneuvers. One of the most commonly injured growth centers is the medial epicondyle. The medial epicondyle is located on the inside of the elbow and is the part of the bone where the muscles that flex the wrist are attached. The medial epicondyle is a growth center and is attached to the rest of the humerus by a thin layer of gristle called a growth plate. This growth plate is responsible for development of the lower part of the bone.

With prolonged physical activity, particularly throwing and gymnastics, the growth plate of the medial epicondyle may become inflamed and irritated.

A child with an injured medial epicondyle may present to the pediatric orthopedist for evaluation of discomfort with motion, especially throwing or the inability to bear weight on their elbow. In addition to the abnormal swelling on the inside part of the elbow there may also be evidence of fluid in the elbow joint.
The x-rays may demonstrate widening of the growth plate of the medial epicondyle and an MRI will often show that the underlying bone is inflamed, irritated and swollen.

Immobilization for a brief period of time to allow for healing of the growth plate is recommended and follow up x-rays are important to demonstrate that the growth plate has become more normal in appearance.

If the child continues with throwing or gymnastics activity despite elbow pain, then a fracture of the medial epicondyle is likely to occur. Displacement of the fragment can be seen on the x-rays. In a large number of individuals, surgically placing the medial epicondyle back into proper alignment and securing it in place with pins or screws results in return to activities once healing is complete.