

BASEBALL ELBOW: WHAT EVERY PARENT SHOULD KNOW BY: DR. SEAN GRAHAM BSc DC

In any sport parents worry about their child sustaining a potential injury by falling, colliding with another player, or being hit with the ball. In baseball children can also be at risk for a condition called “baseball elbow” or, medial epicondylitis. This injury occurs when repetitive throwing creates an excessively strong pull and repeated microscopic tears to the elbow tendons and ligaments. “Baseball Elbow” can be serious if it becomes aggravated. Jeff Zimmerman, a well known Canadian Major League pitcher, knows all too well the long term problems associated with this condition. Repeated pulling from improper conditioning and throwing technique can tear the ligament and tendon away from the bone pulling tiny bone fragments with it. This can disrupt normal bone growth and joint functioning which can result in deformity.

In a recent study, 26 percent of 298 youth pitchers reported elbow pain after a game. To avoid major complications or permanent damage, an athlete should stop throwing if any of the following symptoms appear: pain at the knobby bump on the inside of the elbow, restricted range of elbow motion, or locking of the elbow joint. To prevent, treat, and rehabilitate “baseball elbow” follow these guidelines:

Seek the help and supervision of a qualified sports minded health professional

Apply the “PRICE” principle. (Protect the elbow, Rest, Ice (a bag of frozen peas is best, should be applied for 20 minutes every 1-2 hours for the first 2-3 days post-injury), Compression, Elevation)

Once symptoms have improved, begin a rehabilitation program to increase strength and restore range of motion in the wrist and elbow. The strength deficiencies associated with baseball elbow extend far beyond the elbow to include the arm, shoulder, shoulder blade, back, and neck muscles so strengthening and flexibility exercises should be continued even after rehabilitation is over.

The coach and athletic trainer should be involved in the correction of poor or improper pitching techniques to ensure the player uses good pitching posture and mechanics and reduces the risk for re-injury.

Daily stretching and conditioning are needed to ensure athletic fitness. Distance running (aerobic) and sprint work (anaerobic) should be included. It is crucial that young players undertake a strength training program designed for their age and ability before beginning a formal

throwing program.

Introduce an interval throwing program that utilizes the long overhand toss. The toss distance is decreased by increments as the velocity of the throw is increased. When players are comfortable throwing 45 feet at 50% velocity, they advance to throwing in the bullpen, then off the mound at full effort. A similar program, minus the pitching element, is used for other throwers.

Anti-inflammatory medicines (including cortisone injections) have no curative potential and in fact may be detrimental to tendon healing. Similarly, counterforce braces designed for baseball elbow provide comfort by reducing stresses to underlying damaged tissues, but these braces are not a long term substitute for rehabilitative exercises.

To reduce the risk of baseball elbow in youth players, limit the amount of play. Below is a general guideline for coaches and parents to help prevent baseball elbow in young athletes.

Amount of pitching:

Age Max pitches/game

8-10 37-67

11-12 50-86

13-14 60-96

15-16 75-107

17-18 90-122

Max games/week 1.5-2.5

Minimum age for learning pitches:

age pitch

6-10 fastball

8-12 change-up

12-16 curveball

13-17 knuckleball

14-18 slider

14-18 forkball

15-19 screwball

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