# Pitcher's Elbow

## Introduction

**Pitcher's Elbow**, also called **Little League Elbow**, results from excessive throwing motions used in sports. It most frequently occurs in baseball, but is associated with other sports that involve throwing. Pitcher's Elbow causes pain and interferes with motion. Many cases of Pitcher's Elbow respond to rest and nonoperative treatment. If left untreated, Pitcher's Elbow can lead to significant problems that require surgery.

# **Anatomy**

The two bones in your forearm, the ulna and radius, and your upper arm bone, the humerus, form your elbow joints. Muscles, nerves, tendons, and ligaments allow your elbow joints to bend, straighten, and rotate. Tendons are strong fibers that attach your muscles to your bones, and ligaments connect your bones to each other.

#### Causes

Pitcher's Elbow occurs in players that participate in sports that require repetitive throwing. It most frequently affects pitchers, but may also develop in outfielders, catchers, and infielders. Pitcher's Elbow is associated with other sports as well, including tennis and football.

Pitcher's Elbow is also called Little League Elbow because it occurs in children and teenagers that play sports. The condition is especially concerning for this population because their bones are growing and injuries can affect the growth process. Additionally, their skeletal systems may not be developed enough for the demands of competitive sports.

Pitcher's Elbow results when repetitive throwing puts an excessive strain on the tendons and ligaments in the elbow. The strong movements can cause the ligaments and tendons to stretch, tear, or pull away from the bone. If some of the bone is also torn away in the process, it can interfere with normal bone growth and cause deformity. If the forces are great enough, the bones may slam together, causing the bones or cartilage to fracture, and resulting in a condition called osteochondrosis dissecans.

# **Symptoms**

Pitcher's Elbow causes pain on the inner side of the elbow. Your elbow joint may feel like it locks or gets stuck. It may be difficult to move the elbow as you did before, and it will affect your pitching performance.

# **Diagnosis**

Your doctor can diagnose Pitcher's Elbow by reviewing your medical history and examining your elbow. You should tell your doctor about your sports participation, the number of throws you typically perform, and the length of your practice or playing season. This information will help your doctor determine the magnitude of stress on your elbow. X-rays or magnetic resonance imaging (MRI) scans will be ordered to view your elbow structures.

## **Surgery**

Arthroscopy can both diagnose and treat conditions associated with pitcher's elbow. Arthroscopic surgery uses an arthroscope and narrow surgical instruments that are inserted through small incisions. An arthroscope contains a lens and lighting system that allow a surgeon to view inside of a joint. A miniature camera allows the surgeon to view the magnified images on a video screen or take photographs and record videotape. Arthroscopic surgery is associated with shorter recovery times and less pain and bleeding than open procedures.

Arthroscopic surgery is not appropriate in every case, with some problems requiring open procedures. Your doctor will discuss the type of surgery that is best for your particular problem.

### **Treatment**

You should stop performing throwing activities and allow your elbow to rest if you experience pain. Ice packs may help relieve pain and swelling. Following rest, throwing should be returned to gradually. Physical Therapy exercises may help improve your strength, endurance, and coordination. A therapist experienced in throwing problems can review your pitching motion and body posture and make recommendations to improve your form.

If you undergo surgery, physical therapy is helpful for regaining mobility, strength, and function after your procedure. Your therapists will teach you exercises specifically to improve the health of your muscles. They can help determine when you are ready to play again and advise you on how to care for your elbow during sports.

## **Recovery**

Recovery from pitcher's elbow is different for everyone. It depends on the extent of your condition and the type of treatment that you receive. Most players can return to play when their rehabilitation is complete. Your doctors will let you know what to expect.

### Prevention

You may prevent Pitcher's Elbow by taking breaks from pitching, limiting the amount of throwing that you do, and altering your throwing motion, if necessary. Be sure to warm-up before pitching. Exercise to keep your arm strong and flexible.

This information is intended for educational and informational purposes only. It should not be used in place of an individual consultation or examination or replace the advice of your health care professional and should not be relied upon to determine diagnosis or course of treatment.