

# Adolescent Osteochondritis Dissecans of the Elbow

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## Introduction

Young gymnasts and overhand athletes, particularly baseball pitchers and racket-sport players, are prone to an odd and troubling elbow condition. The forceful and repeated actions of these sports can strain the immature surface of the outer part of the elbow joint. The bone under the joint surface weakens and becomes injured, which damages the blood vessels going to the bone. Without blood flow, the small section of bone dies. The injured bone cracks. It may actually break off. This condition is called osteochondritis dissecans (OCD).

In the past, this condition was called Little Leaguer's elbow. It got its name because it was so common in baseball pitchers between the ages of 12 and 20. Now it is known that other sports, primarily gymnastics and racket sports, put similar forces on the elbow. These sports can also lead to elbow OCD in adolescent athletes.

This guide will help you understand

- how this problem develops
- how doctors identify the problem
- what treatment options are available

## Anatomy

What part of the elbow does this problem affect?

The elbow is the connection of the upper arm bone (the humerus) and the two bones of the forearm (the ulna and the radius). The radius runs from the outer edge of the elbow down the forearm to the thumb-side of the wrist.

The joint where the humerus meets the radius is called the humeroradial joint. This joint is formed by a knob and a shallow cup. The knob on the end of the humerus is called the capitellum. The capitellum fits into the cup-shaped end of the radius. This cup is called the head of the radius.

When the head of the radius spins on the capitellum, the forearm rotates so that the palm faces up toward the ceiling (supination) or down toward the floor (pronation). The joint also hinges as the elbow bends and straightens.

In the elbow joint, the ends of the bones are covered with articular cartilage. Articular cartilage is a slick, smooth material. It protects the bone ends from friction when they rub together as the elbow moves. Articular cartilage is soft enough to act as a shock absorber. It is also tough enough to last a lifetime, if it is not injured.

Elbow OCD affects the articular cartilage in the capitellum. It also affects the layer of bone just below the cartilage, which is called the subchondral bone. In advanced stages of OCD, the upper end of the radius, particularly the head of the radius, is also involved.

Related Document: [A Patient's Guide to Elbow Anatomy](#)

Bad cases of elbow OCD, and those that are not caught and treated early, tend to create bigger problems later in life. The joint may become arthritic early in adulthood. As a result, the patient may always have greater difficulty using the problem elbow.

Related Document: [A Patient's Guide to Elbow Osteoarthritis](#)