

## The Curveball Debate Revisited: WHY Do They Cause Injury?

March 12, 2012

A [front cover story in the NY Times](#) today:

March 11, 2012

### **Young Arms and Curveballs: A Scientific Twist**

By BILL PENNINGTON

contains great information on curveballs and correctly states WHY they cause elbow injuries.

Many coaches still believe “*it’s the snap of the wrist that causes injury*” but this theory was [disproved in 2009](#):

[Am J Sports Med](#). 2009 Aug;37(8):1492-8. Epub 2009 May 15.

#### **A biomechanical comparison of the fastball and curveball in adolescent baseball pitchers.**

[Nissen CW](#), [Westwell M](#), [Ounpuu S](#), [Patel M](#), [Solomito M](#), [Tate J](#).

Elite Sports Medicine, Connecticut Children’s Medical Center, 399 Farmington Avenue, Farmington, Connecticut 06032, USA. [cnissen@ccmckids.org](mailto:cnissen@ccmckids.org)

Instead, the article correctly states **elbow injuries occur from a COMBINATION of**

1) **Improper pitching mechanics** (in the form of tilting the shoulders to “get on top of the ball):

on the baseball field. **Many kids don’t have proper mechanics or enough neuromuscular control, or they are fatigued when throwing curveballs. Things break down.**

As well as:

2) **Throwing too many pitches during the season** that is most common in kids who play year-round baseball:

One aspect of the curveball debate, and the studies it has spawned, that **everyone agrees on is that throwing too many pitches of any type is the biggest danger.**

### How do you know if your pitching mechanics are correct?

You can make an appt with Dr. Arnold to get a [pitching video analysis](#) done.

### Have Any Questions About This Newsletter?

Call (631-352-7654) or email ([PitchingDoc@msn.com](mailto:PitchingDoc@msn.com)) Dr. Arnold!