

Teen Athletes Feel the Pinch of Tommy John Surgery

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Tommy John surgeries for elbow overuse injuries were common in teen athletes

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(dailyRx News) When it comes to high school and college sports, young athletes who wind up too often on the field may also wind up in the surgical room.

A new study found a significant increase in teen athletes needing an elbow surgery called an ulnar collateral ligament reconstruction (UCLR), known as Tommy John surgery.

"Our results showed that 15- to 19-year-olds accounted for 56.7 percent of the Ulnar Collateral Ligament Reconstruction (UCLR) or Tommy John surgeries performed in the US between 2007 to 2011," said lead study author Brandon Erickson, MD, of Rush University Medical Center in Chicago, in a press release. "This is a significant increase over time with an average increase of 9.12 percent per year."

UCLR is a surgical graft procedure in which the ulnar collateral ligament in the elbow is replaced with a tendon from elsewhere in the body.

Michael Nguyen, MD, an orthopedic surgeon and sports injury expert at Baylor Regional Medical Center at Grapevine, TX, told dailyRx News, "This surgery requires a 12 to 15 month recovery process to return to a high level of sport in a throwing athlete, and the vast majority of these injuries occur in pitchers."

Dr. Erickson and team looked at a private insurance database to identify patients who received UCLR surgeries throughout the US.

About 4 out of every 100,000 patients who had surgery between 2007 and 2011 had a UCLR surgery. These patients were overwhelmingly male, with 32 percent coming from the 15- to 17-year-old age group and 22 percent coming from the 20- to 24-year-old age group.

These surgeries grew at a rate of 4.2 percent each year between 2007 and 2011. And more than half were performed in the southern region of the US.

According to Dr. Erickson and team, more attention should be given to prevention because overuse injuries tend to occur in intensive training and high-performance games.

"The research numbers suggest that more young athletes believe that having an UCLR procedure performed earlier in their career may lead to the big leagues or a scholarship, even though only 1 in 200 kids who play high school baseball will make it to the MLB," Dr. Erickson said. "This paradigm shift needs to be evaluated further to help prevent overuse injuries in kids from the beginning of the season when most issues arise."

Dr. Nguyen recommended proper pitching mechanics and limiting throwing as efforts that may prevent UCLR injury.

"Early sport-specialization, where kids play only one sport, is a risk factor for elbow injury," Dr. Nguyen said. "More kids are also playing year-round which does not give young, immature elbows a chance to rest from the rigors of a full season."

This study was presented July 12 at the American Orthopaedic Society for Sports Medicine's annual meeting. Research presented at conferences may not have been peer-reviewed.

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