

The Rise of Overuse Injuries in Youth Baseball

By SUMATHI REDDY

On the Pearland Little League team in Texas just about every 12- and 13-year-old takes his turn on the pitcher's mound.

This is one strategy coach Andrew Solomon, whose team placed second in the country in the 2015 Little League World Series, has taken to avoid

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the increasingly common elbow and shoulder injuries that plague youth baseball players. Mr. Solomon's rigidity with adhering to established Little League rules such as pitch counts and days of rest, along with plenty of stretching, strength training and making sure each pitcher has proper form have made his team injury-free in the six or so years he has been coaching the players.

"A lot of teams rely way too heavily on two or three kids to pitch and those kids are getting overpitched from a pretty young age," he says.

Surgeons are seeing big increases in young players with damaged ulnar collateral ligaments (UCL) in the elbow, says Brandon Erickson, an orthopedic surgeon resident at Rush University Medi-

cal Center in Chicago who has studied the issue. A UCL tear is an overuse injury of the elbow. The surgery to fix it is commonly referred to as Tommy John surgery after the first baseball player, major league pitcher Tommy John, to undergo reconstruction surgery for the injury. The surgery involves removing the UCL with a tendon from another part of the body or a donor.

Teens, age 15 to 19, had more Tommy John surgeries than any other age group, a study found.

Older teens, age 15 to 19, accounted for significantly more Tommy John surgeries than any other age group in a study in the American Journal of Sports Medicine last year. Dr. Erickson and colleagues analyzed a database of 790 patients who underwent the surgery between 2007 and 2011. They also found that rates of surgeries among 15- to 19-year-old patients were increasing more than 9% a year.

James Andrews, an orthopedic surgeon and chairman of the board

of the American Sports Medicine Institute, has spearheaded many of the efforts to create pitching guidelines. Youth baseball injuries to the shoulder and elbow have gone up five-to sevenfold since 2000, he said. In 2000 he did maybe eight or nine Tommy John surgeries on children and teens a year.

"Now it's the number one age bracket of all the Tommy Johns we do," he says. "The majority are coming in from high school."

Shoulder injuries are common too, he says, and can include injuries to the rotator cuff and tears in the labrum. Surgeons are often more reluctant to operate on the shoulder because the success rate is much lower than it is for the elbow, he said.

A group of medical experts, including Dr. Andrews, convened by the Major League Baseball Commissioner devised pitching guidelines in 2014, called Pitch Smart, which are broken down by age. They determined that 7- to 8-year-olds should pitch a maximum of 50 pitches in a game. The numbers increase up to 105 pitches by age 17.

The guidelines have been adopted by most national youth baseball programs, including Little

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Almost every player on the Pearland Little League team, shown here during a 2015 game in Waco, Texas, pitches to help the 12- to 13-year-olds avoid injury.