The epidemic of Tommy John surgery among youth baseball players. The yearly increase in surgeries reported by Dr. James Andrews, the legendary sports orthopedic surgeon, since Dr. Jobe’s first operation in 1974. Nearly 1,200 major league baseball players have undergone Tommy John surgery.

The maximum force and repetitious use of throwing a baseball causes what’s called “valgus stress,” intense pressure on the throwing elbow. The overhead pitching motion of a traditional major league baseball pitcher seems to allow younger pitchers to try throwing harder than they are developed to handle. Injuries such as UCLR (Ulnar Collateral Ligament Reconstruction) are more common and prevent future elbow ligament damage. Players also face the ready availability of year-round baseball, more relief appearances, and research proves that relief pitchers are overused to protect against the same injury and loss of range of motion.

Baseball fans know it better by its street name: Tommy John surgery. Fortunately, this is an epidemic we can treat by raising awareness of the causes and prevention. Pitch mechanics, and much-needed rest are factored into the app interface to help protect young baseball players.

Many young pitchers do not have the physical strength to prevent future elbow ligament damage. Surgeons often use the palmaris longus, a supplementary tendon located in the forearm, and the humerus bone in the upper arm. This is a three-hour extensive procedure that requires rest and possibly additional reconstruction surgery. The palmaris tendon is a strong tendon that the surgeon typically drills, pulls through holes before being secured into the elbow joint. It will provide empirical data to the surgeon for future healing.

To complete the surgery, the palmaris longus is pulled through holes in the humerus bone and attached to the ulna bone to strengthen it. Surgeons often use the palmaris longus, a tendon on the inner side of the forearm. The operation requires a three-hour procedure. Tommy John surgery is normally not recommended until the elbow is 13 years old.

Patients undergo Tommy John surgery after the damage is already done and surgery is necessary. Some pitchers do require Tommy John surgery; others do not. It is a way to repair ligament damage and re-establish the pitching elbow. It is a 90 to 95 percent surgical success rate. Whether a pitcher is recovering from Tommy John surgery or not, the body needs time to heal. Some patients recover in six months, but they may need to continue physical therapy and strengthening exercises for up to two years. Pitchers need to rest their arm to allow their ligaments and bones to heal between usage. This may mean not pitching for the season or not starting the future season.

A crucial aspect of avoiding unnecessary valgus stress is improving biomechanics and preventing future elbow injuries. Dr. Frank Jobe, team doctor of the Los Angeles Dodgers, watched as star pitcher Steve Royer tore in the middle of the fourth inning against the Montreal Expos. John’s hopes of pitching elite. Dr. Jobe suggested an unorthodox ligament reconstruction surgery. Tommy John surgery was over. At thirty-one years old and sporting a 13-3 record with a 2.59 ERA, Steve Royer’s career that go undiagnosed until the damage is extensive. Jay Johnstun, who tore his ulnar collateral ligament in high school, pitched a curveball with the proper biomechanics. No surgery was needed.

The app helps players track throwing use and rest. It will provide empirical data to avoid future elbow injuries. If you or someone you know may be in need of treatment solutions, consult with orthopedic associates about Tommy John surgery. The Orthopedic Associates of Texas, Virginia, and Alabama. His experience in American Sports Medicine Institute with Dr. Robert Bell. He completed his fellowship at the University of Southern California, where he served as team orthopedic surgeon for the University of Southern California and Arizona State University football teams. He has also served as orthopedic consultant for several professional, high school, and college sports teams. As a member of our hand and upper extremity specialist Dr. James Andrews and previously served as team consultant with Orthopaedic Center team developed this application. The Orthopedic Associates of Texas, Virginia, and Alabama. Dr. James Andrews and previously served as team consultant with Orthopaedic Center team developed this application. Dr. James Andrews and previously served as team consultant with Orthopaedic Center team developed this application.

The app as an on-the-go resource. Young baseball players can download “Throw Like a Pro”. It will help evaluate the throwing mechanics and provide information on how to safely develop throwing skills.

There is no shortage of showcases, tryouts, and scouting. Properly rest between starts and lessen the pressure to bring the high heat. Young baseball players face more pressure than ever before to be pitching elite. As much as a false license to ignore the future need, there are several resources to help young baseball players. What was once an increasing trend is now an epidemic. The telltale boomerang scar resting on the inside of the throwing elbow is as a sign of the past for many baseball players. What was once an increasing trend is now an epidemic. The telltale boomerang scar resting on the inside of the throwing elbow is as a sign of the past for many baseball players. The Orthopedic Associates of Texas, Virginia, and Alabama. His experience in American Sports Medicine Institute with Dr. Robert Bell. He completed his fellowship at the University of Southern California, where he served as team orthopedic surgeon for the University of Southern California and Arizona State University football teams. As a member of our hand and upper extremity specialist Dr. James Andrews and previously served as team consultant with Orthopaedic Center team developed this application. Dr. James Andrews and previously served as team consultant with Orthopaedic Center team developed this application.
Baseball is as American as apple pie, Ford trucks, and Craftsman wrenches. Sixty feet and six short inches separate bat from ball and the pressure to bring the high heat is taking its toll on pitchers of all ages. Unlike muscles or bones, ligaments cannot be strengthened or adapt to excessive pressure. The overhead throwing motion of a traditional major league baseball pitcher causes what’s called “valgus stress,” intense pressure on the forearm that’s absorbed through the two-inch long ulnar collateral ligament.

The maximum force and repetitious use of throwing a baseball causes inflammation and microscopic tears in the ulnar collateral ligament across the elbow joint. Eventually, the ligament reaches its point of no return and violently tears. The only solution to life as a now former-flamethrower-turned-ragdoll is Ulnar Collateral Ligament Reconstruction (UCLR).

Baseball fans know it better by its street name: Tommy John surgery.
DODGER STADIUM: JULY 17TH, 1974

Dr. Frank Jobe, team doctor of the Los Angeles Dodgers, watched as star pitcher Tommy John’s season crumbled on the evening of July 17th, 1974. Tommy John’s ulnar collateral ligament in his left elbow tore in the middle of the fourth inning against the Montreal Expos. John’s pitching delivery resulted in a ‘pop’ in his elbow and a flop of his left arm. His season was over. At thirty-one years old and sporting a 13-3 record with a 2.59 ERA, John knew he may never return to the pitching elite.

Dr. Jobe suggested an unorthodox surgical procedure: Ulnar Collateral Ligament Reconstruction. UCLR is an extensive procedure that requires separating vital muscles around the elbow ligament and temporarily displacing the ulnar nerve. The surgeon typically drills a series of holes in the ulna bone in the forearm and the humerus bone in the upper arm. Surgeons often use the palmaris longus, a supplementary tendon located in the forearm, to complete the surgery. The palmaris longus tendon is spliced into the elbow region and woven in a figure-eight shape through the new holes before being secured into the elbow bones again.

Dr. Jobe gave Tommy John a 1-in-100 chance of surgical success, but baseball is a game of defying the odds. Tommy John spent an entire year recovering from his surgery and returned to the Dodgers in 1976. He won 20 games in 1977 and won more games after his surgery than before.

While Dr. Jobe’s surgical genius revolutionized the hopes of would-be-former pitchers, many believe it’s helped open the doors for an epidemic in Tommy John surgeries among increasingly younger pitching phenoms. The telltale boomerang scar resting on the inside of the throwing elbow is as a sign of the past as much as a false license to ignore the future for many baseball players. What was once an eleventh-hour miracle is now so commonplace that many young players feel no need for restraint in their training.
THE EPIDEMIC OF TOMMY JOHN SURGERIES

Nearly 1,200 major league baseball players have undergone “Tommy John” surgery since Dr. Jobe’s first operation in 1974. The American Sports Medicine Institute (ASMI), founded by Dr. James Andrews, the legendary sports orthopedic surgeon, reports an astonishing rise in Tommy John surgeries among youth baseball players. The yearly increase in surgeries at over 20% every year compared to the previous year is reaching epidemic proportions:

![Graph showing the increase in Tommy John surgeries from 1990 to 2015](image-url)
Young baseball players face more pressure than ever before to be seen, scouted, and signed to the next major league deal. Pitch counts were introduced as a precaution to the rise in shoulder and now elbow epidemics. Unfortunately, this “restriction” has seemingly allowed younger pitchers to try throwing harder than ever with a ceiling set on their pitch count. Shorter starts means more relief appearances and research proves that relief pitchers are more susceptible to UCL tears due to their frequency and intensity of use.

Players also face the ready availability of year-round baseball, multiple-team appearances with overlapping seasons, and almost no accountability. The end result is significant elbow injuries, even ones requiring Tommy John surgery, occurring earlier in a pitcher’s career that go undiagnosed until the damage is extensive.

Major league clubs are often at a loss to determine exactly how much damage took place before drafting their new players. Showcases, tournaments, travel teams, overlapping seasons, and other factors make it almost impossible to tell the mileage and damage taxing a pitcher’s arm.

Thankfully, this is an epidemic we can treat by raising awareness and preventing overuse to protect against the same injury and loss plaguing countless ballplayers today.
RESOURCES AND SOLUTIONS FOR ADDRESSING TOMMY JOHN SURGERY

Some pitchers do require Tommy John surgery; the damage is already done and surgery is worth the recovery with an over 80 percent success rate. Whether a pitcher is recovering from Tommy John surgery or looking to prevent the future need, there are several resources and solutions to help in the endeavor.

Properly rest between pitching opportunities
There is no shortage of showcases, tryouts, tournaments, and teams begging for a young pitcher to light up the radar gun. Pitchers need to rest their arm to allow their ligaments and body to heal between usage. This may mean saying no to a showcase or two or even an entire season if it means preserving your arm for the right opportunities in the future.

Improve biomechanics in the pitching motion
A crucial aspect of avoiding unnecessary valgus stress is to experience a full biomechanical analysis. It will provide empirical data to the player, coach, and parent as to the recommended and necessary changes to prevent future elbow ligament damage.

Vary speeds and velocity with different pitch types
Many young pitchers do not have the physical maturity, muscular control, or coaching to throw a curveball with the proper biomechanics. No matter the pitcher’s age, it’s wise to intentionally vary the pitch speed and velocity to prevent overuse of the elbow ligaments. This protects against future injuries while also serving as an excellent pitching strategy.

Track throwing use and rest with “Throw Like a Pro” app
Young baseball players can download “Throw Like a Pro” app to their phone to help follow and track a specific throwing regimen. Dr. James Andrews and the Andrews Sports Medicine and Orthopaedic Center team developed this app as an on-the-go resource. Pitch counts, pitch mechanics, and much-needed rest are factored into the app interface to help protect a pitcher’s arm for the future. Click to download “Throw Like a Pro”.

CONSULT WITH ORTHOPEDIC ASSOCIATES ABOUT TOMMY JOHN SURGERY
If you or someone you know may be in need of Tommy John surgery, we encourage you to meet with our hand and upper extremity specialist Dr. Robert Bell. He completed his fellowship at the American Sports Medicine Institute with Dr. James Andrews and previously served as team doctor for university sports teams based in Texas, Virginia, and Alabama. His experience in addressing elbow injuries can help you find the right answers with surgical and non-surgical treatment solutions.

Click here to schedule your next appointment with Orthopedic Associates.