



TOMMY JOHN FAQ

1. What is Tommy John surgery?

Tommy John surgery is a reconstruction of the ulnar collateral ligament (UCL) of the elbow. A tendon from elsewhere in the body is used to repair a torn or ruptured UCL. It was first performed by Dr. Frank Jobe in 1974 on Tommy John, a pitcher for the Los Angeles Dodgers.

2. Does an athlete require an actual elbow injury to undergo the surgery?

Yes. 51% of high school athletes incorrectly believe that Tommy John surgery should be performed on players with an elbow injury to enhance performance. However, the only approved medical reason for Tommy John surgery is a torn or ruptured ulnar collateral ligament. The procedure should not be performed in the absence of an injury.

3. How many pitchers undergo Tommy John surgery per year?

Historically, 15-20 Major League pitchers have undergone Tommy John surgery per year but over the past three years that number has increased to 25-30. A 2012-2013 survey of active players found that 25% of Major League pitchers and 15% of Minor League pitchers had undergone Tommy John surgery at some point in their careers.

4. Are pitchers having the surgery at a younger age?

While accurate numbers are difficult to find for the Minor Leagues and amateur levels, anecdotal evidence strongly supports the notion that younger pitchers are undergoing the procedure at an unprecedented rate. Records from the American Sports Medicine Institute show that the number of Tommy John surgeries performed on youth pitchers at their facility have more than doubled since 2000.

5. What factors influence the likelihood of an arm injury?

There are a number of factors that contribute to the likelihood of having Tommy John surgery or another arm injury. The single most important factor is daily, weekly and annual overuse.

Other factors include lack of rest, pitching while fatigued, poor mechanics, playing catcher when not pitching and playing on multiple teams at the same time. There are also certain behaviors which may increase your likelihood of an arm injury, including throwing curveballs and sliders, pitching multiple days in a row and throwing at maximum effort.

6. How often are pitchers able to return to play baseball after Tommy John surgery?

Overall, Tommy John surgery has a high rate of return to play, particularly relative to other common procedures for pitchers. Most studies have concluded that 70-80% of pitchers return to their previous level of competition following surgery assuming that they follow rehab protocols. However, the rate and time of return to play vary according to the individual and there are many other issues that may complicate the success rate of the surgery.

7. How long does it take to return to competitive throwing following surgery?

The average pitcher returns to game action 12-16 months following surgery but that time varies greatly by individual. In a recent study by Romeo et al., Major League pitchers returned in as little as 11 months and as many as 30 months. The player's return also depends on when the surgery is performed in the context of the baseball season as well as the severity of the injury. Players, parents and coaches should remember that each injury is unique and has its own timeline for recovery.

8. Does Tommy John surgery improve performance?

35% of parents incorrectly believe that overall pitching performance would be enhanced following surgery. While there are notable instances of players improving following surgery, the most optimistic expectation for a pitcher undergoing Tommy John surgery is that the procedure allows the player to return to his previous level of performance. In fact, two recent studies have shown that players returning from Tommy John surgery tend to follow the typical aging pattern for players without surgery.

9. Does Tommy John surgery improve pitching speed?

No. 53% of college athletes incorrectly believe that pitching speed would improve following Tommy John surgery. Similar to overall performance, players do not throw harder after Tommy John surgery than they did before the procedure. Most doctors have concluded that in cases where pitchers who have thrown harder post-surgery, it was predominantly due to the quality of their rehabilitation and improved strength and conditioning.

10. How often do pitchers suffer another arm injury after having Tommy John surgery?

A subsequent arm injury is common among pitchers who have had Tommy John surgery. More than half of Major League pitchers who underwent Tommy John surgery from 1999 to 2011 went on the Disabled List with an arm injury after returning from surgery. Another recent study from the American Sports Medicine Institute (ASMI) concluded that 19% of Tommy John patients will have a subsequent elbow surgery and 25% will have shoulder surgery.

11. Can someone have Tommy John surgery twice?

Yes. 2-4% of pitchers undergo a second Tommy John surgery, often called a UCL revision. There have been fewer studies of players with revisions, but those have shown that these pitchers also are able to return to play at a high rate, though often in a reduced role.

12. Would lowering or eliminating the mound reduce the stress on the elbow and reduce the number of UCL injuries?

It's unclear. Most studies have concluded that there is little difference in stress between pitching on the mound and throwing from flat ground but other studies have shown significant differences. Overall, amount of pitching, pitching mechanics and rest have been shown to be much more important factors than mound height.

13. Are players who throw harder more susceptible to UCL injuries?

There is evidence that players who throw harder are more susceptible to UCL injuries, ostensibly because the increased velocity correlates with force in the elbow. Many studies have shown that players who throw harder are more likely to spend time on the Disabled List or miss time due to surgery. Pitchers who throw harder should be especially cognizant of the recommendations on pitch counts, rest and fatigue.

The relationship between velocity and injury is complicated. Increased velocity is also associated with improved performance such that players with higher velocity have longer careers and also perform better. Therefore, it would be unrealistic to recommend that pitchers simply not throw as hard. However, varying speeds might improve a pitcher's effectiveness and conceivably also reduce injury risk.

14. Does long-toss reduce the number of arm injuries?

While there are many advocates on both sides of this issue, it is important for the player not to exceed the distance at which he feels comfortable and which does not change his biomechanics. One recent study concluded an appropriate long-toss distance is typically 120 feet for college pitchers, but certain pitchers may be capable of throwing from longer distances while still maintain proper biomechanics and throwing the ball on a relatively horizontal trajectory.

