Q: I’m hearing more stories of young baseball and softball pitchers suffering shoulder and elbow injuries. What is causing this jump in injuries?

A: Travel and instructional teams have recently become popular in baseball and softball. In addition to their school and summer teams, some boys and girls are playing more baseball and softball than ever. More play may result in better performance. But for some, more play means more injuries, especially at the shoulder and elbow.

Pitch count is very important. Most professional starting pitchers throw only 100 balls a game, then rest for five days. But some Little Leaguers throw many more, especially if they are the “best” pitchers on their respective teams. And while the windmill pitch used in softball may be somewhat safer than the overhead baseball pitch, I am seeing more girls with injuries after pitching several games in a week.

Many don’t know that pitching effectiveness comes from pitch placement and variation in pitch speed as much as simply “bringing the heat.” Effective starting pitchers in the big leagues rarely throw as hard as they can. Pitching mechanics are also very important to minimizing injury and several hours with a good pitching instructor is often time well spent in effectiveness and in avoiding or limiting injury.

Throwing a ball causes huge forces at the shoulder and elbow that can easily cause injury. Anterior instability is the ball of the shoulder sliding out the front from its normal position. It can occur when the shoulder is placed beyond the limit of its normal range of motion. This may occur when a ball player “reaches back” to throw really hard. Throwers with anterior instability will report pain and sometimes a sensation of the shoulder sliding out.

Achy pain that persists for several hours or days after throwing is common. The medial collateral ligament (MCL) of the elbow can also be injured from throwing. This ligament is on the inside of the elbow and injury initially results in pain with hard throws. Pitch velocity is lost. A pop with immediate sharp pain is felt on the inside of the elbow if the MCL tears. Fortunately, this is uncommon and most patients have mild shoulder and elbow injuries. Then, a proper rehabilitation program and rest for a few weeks to a few months is often effective as first treatment. If this does not work, their evaluation by an orthopedic surgeon with expertise in shoulder and elbow problems is the next best step.