

Learning to Throw Right

By Gary Calabrese, P.T.

LITTLE LEAGUE SHOULDER OR ELBOW, ROTATOR CUFF TENDONITIS/ECCENTRIC OVERLOAD SYNDROME, SHOULDER INSTABILITY AND ULNAR COLLATERAL LIGAMENT INJURY ARE ALL TOO COMMON in young baseball players. Without proper diagnosis and treatment, these injuries can deteriorate to the point of requiring surgery. In fact, orthopaedic surgeons across the country have seen a dramatic increase in recent years in elbow and shoulder surgeries in young ball players. To stem the tide, Cleveland Clinic Sports Health has developed "Throw Right," a sophisticated program that teaches pitchers to, of course, throw right.

Throw Right is for athletes of all ages, youngsters ages 7 or 8 through professionals. But it is primarily geared toward players ages 12 through 16, when proper pitching mechanics can be instilled, reducing the risk of future musculoskeletal problems. Most athletes enroll in the program when they are already experiencing pain; about 25 percent come in for prevention.

Video motion analysis takes place in the Lerner Research Institute biomechanics lab. Sensors are placed on various joints, and cameras record the precise motion as a patient pitches from the indoor mound. Information is digitized to produce a video of the throwing motion. In addition, 31 measurements, such as range of motion, flexibility, upper and lower body power, help identify problems.

We have identified 17 common pitching mechanics errors that lead to injuries. When we analyze individual video and measurements, we can determine which specific errors the pitcher is committing and help correct them. Correcting mechanics not only improves injuries but often improves pitching as well.

It is important for pitchers to pay attention to pain, not attempt to play through it.

In addition to poor technique, throwing injuries result from overuse and lack of or inappropriate strength training. The program addresses these issues as well. Athletes are encouraged to continue strength training and core conditioning while we institute relative rest to avoid deconditioning.

Cleveland Clinic Sports Health offers five specialized performance programs: Throw Right, Jump Right (geared to young female athletes to help avoid ACL injury), Match Fit (soccer), Golf Performance Plus, and Optimal Running. A Lift Right program is being developed. For more information, call 216.444.6000. Also visit sports-health.org for advice on preventing injuries.

