

Shoulder Injuries: From Cause to Cure

Years of intense weightlifting workouts and competition took a toll on Matthew's shoulder. He first noticed that something was wrong when his shoulder began feeling uncomfortable following his workouts. Soon, the pain was waking him at night. Eventually, he heard disturbing clicking and popping sounds when he moved or rotated his shoulder as the ball of his worn joint rubbed against his clavicle.

Eventually, Matt came to Commonwealth Orthopaedics for treatment. His physician, George Aguiar, MD, who specializes in sports medicine, arthroscopy and shoulder surgery, diagnosed a partially torn rotator cuff with bone spurs on the joint. Matt underwent arthroscopic shoulder surgery to repair his rotator cuff and smooth the spurs at Commonwealth's Outpatient Surgery Center in Herndon.

Rotator cuff tears are among the most common shoulder injuries seen by Commonwealth Orthopaedics' surgeons. Other afflictions include rotator cuff tendinitis, shoulder instability (dislocation) and frozen shoulder. Because it is the most flexible joint in the body, the shoulder is highly vulnerable to injury. "Patients should be aware that accurate diagnosis of each acute or chronic shoulder injury is imperative for not only appropriate treatment but best possible results," Dr. Aguiar says. Weight-lifters such as Matt, as well as swimmers and tennis players, are most likely to suffer a shoulder injury, but even everyday activities can place strain on the shoulder and cause pain.

"Early diagnosis and treatment are critical, especially with acute injuries" says David Novak, MD, a fellowship trained orthopaedic surgeon who specializes in sports medicine, arthroscopy and shoulder surgery. "Untreated shoulder problems can disrupt day-to-day

activities, cause sleep problems, and, over time, may lead to arthritis."

Rotator Cuff Tendinitis

Rotator cuff tendinitis occurs when large tendons that give the shoulder strength and stability become inflamed and irritated, causing dysfunction and pain.

"Rotator cuff tendinitis can affect anyone, but is most common among middle-aged patients and overhead athletes—those who throw, swim, play tennis or volleyball," says Matthew Levine, MD, a Commonwealth Orthopaedics surgeon specializing in sports medicine, arthroscopy and shoulder surgery. "Treatment includes oral anti-inflammatory medications, injections, and stretching and strengthening exercises with a physical therapist." The physical therapist can also help athletes adjust their pitching technique, tennis serve or swim stroke to prevent re-injury. "Proper mechanics are essential to avoiding another injury. It's also important to build and maintain strength in the shoulder muscles and wing bones," Dr. Novak says.

Rotator Cuff Tear

A rotator cuff tear is more acute than tendinitis and usually causes prolonged and worsening pain. An MRI can determine if a patient has a torn rotator cuff.

Several treatment options exist. Many patients with small tears find relief through non-surgical methods similar to those for rotator cuff tendinitis, such as a combination of injections, activity modification and physical therapy. Patients with larger, more severe tears may require surgery. Common surgical methods include traditional open repair; mini-open repair (using arthroscopy and a smaller incision); and all-arthroscopic repair. In this procedure, the surgeon

“My Commonwealth physician was awesome. He treated me like more than just another patient. He was very sincere and very responsive. He even called me over the holidays to see how I was doing.”



inserts a small camera and instruments through tiny incisions and uses the instruments to find and fix the tear. “Unfortunately, most rotator cuff tears do not heal spontaneously. The vast majority of symptomatic rotator cuff tears in active patients of all ages benefit from surgical intervention,” Dr. Aguiar says.

A vast majority of Commonwealth Orthopaedics patients who have undergone surgery for rotator cuff tears report excellent results. “Most of these repairs are now being done arthroscopically or via minimally invasive approaches,” says Dr. Aguiar.

Shoulder Instability

Sometimes an injury causes the shoulder to dislocate and come out of its socket. The shoulder can be put back in place, but often the joint remains unstable, especially if the supporting ligaments were also injured. Left untreated, shoulder instability can lead to repeated dislocations, even during moderate, everyday activities.

Shoulder instability is diagnosed with an X-ray, MRI or arthroscope. As with other shoulder problems, the patient has two treatment options. The non-surgical approach usually involves the use of heat or ice along with manipulation and an exercise program. The most common surgical method is Bankart Repair, which involves the sewing or stapling of ligaments (along with the labrum) to the bone. The Capsular Shift is another option in which the surgeon pulls a flap of tissue over the capsule and sews it together. Full recovery from shoulder instability can

take up to six months, and includes the use of a sling as well as physical therapy.

Frozen Shoulder

This condition—the cause of which remains unknown—is characterized by pain, stiffness and a loss of motion. It particularly afflicts women between 40 and 70 years of age and is more common in patients with diabetes.

Early treatment with oral medication (and in some cases heat or an injection) can alleviate much of the pain. Physical therapy, especially stretching and reaching exercises, can help restore motion to the shoulder. In a majority of cases, these simple approaches are effective. In more severe situations, shoulder arthroscopy is performed to cut through the tight portions of the joint capsule.

No matter what the diagnosis, it’s important patients see an orthopaedic surgeon for shoulder injuries. With minimally-invasive procedures in their arsenal, Commonwealth Orthopaedic physicians have more options than ever before to treat these painful conditions. “Early treatment reduces the duration of symptoms and prevents the injury from progressing,” Dr. Levine says. “People get back to their normal day-to-day activities sooner, and high-caliber athletes can return to the sports they love.”

This is certainly true for Matt. Today, he is back to lifting weights and playing racquetball and basketball two to three times a week—enjoying his active lifestyle and pushing toward a total recovery.

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- Dr. Matthew Levine, MD



George Aguiar, MD, earned a BS in Biology from Georgetown University and his medical degree from Georgetown University Medical Center where he completed his surgical internship and orthopaedic residency. Dr. Aguiar is board certified in orthopaedic surgery and a fellow at the American Academy of Orthopaedic Surgeons.



Matthew J. Levine, MD, earned his medical degree at the University of Pennsylvania. He completed his orthopaedic surgery residency at George Washington University and fellowship in sports medicine and shoulder surgery at Duke University. Dr. Levine also completed a fellowship in shoulder and elbow reconstruction in Sydney, Australia. He is a life-long athlete and has extensive experience in sports medicine.



David J. Novak, MD, earned a BA in Economics from the University of Pennsylvania. Dr. Novak received his medical degree from Georgetown University where he was named a member of Alpha Omega Alpha, the National Medical Honor Society. He completed his residency in orthopaedic surgery at Georgetown University Medical Center and he completed advanced fellowship training in sports medicine and arthroscopy at the Southern California Orthopedic Institute in Van Nuys, California.

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