

Rotator Cuff 101

Every year, more than two million American adults seek medical care for rotator cuff disease.



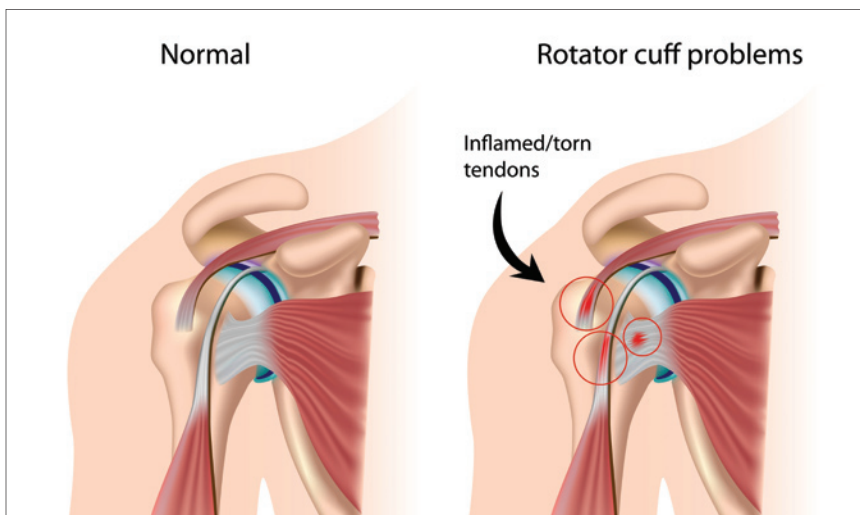
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The rotator cuff is a series of 4 muscles surrounding the ball and socket joint of the shoulder and plays a crucial role in optimizing shoulder function. The shoulder joint is inherently unstable, as the major muscles that move the shoulder around—the deltoid, the pectoralis, the back muscles—have a tendency to move the ball out of the center of the socket. The rotator cuff, almost as a counterforce against the major muscles, helps to provide a stable fulcrum and to optimize shoulder mechanics.

As you might imagine, the muscles of the rotator cuff are subjected to quite a bit of stress. Friction and heavy usage (through sports or other repetitive activity) can cause the tendons of the rotator cuff to thicken or become inflamed and get “pinched” by the shoulder bones. This impingement, a result of extrinsic pressure, friction, or irritation was long thought to be the main cause of rotator cuff tears.

We’ve come to realize there are also some intrinsic problems with the rotator cuff tendon itself. It is an area that commonly degenerates—as a result of genetic variables and a less than optimal blood supply—and can become painful in and of itself, even without a tear. It can gradually atrophy almost completely off the insertion point, creating a chronic degenerative tear. With trauma, the rotator cuff can be pulled directly off the bone.



It’s important to recognize that most people who have shoulder pain don’t have a rotator cuff tear; there are many other causes. Pain from a rotator cuff tear is usually experienced on the lateral aspect of the arm, almost midway between the shoulder and the elbow. It’s usually worse with overhead activity and worse at night. If this sort of pain is accompanied by weakness, it probably should be checked right away.

If there’s no weakness involved, just aches and pain, then ice, anti-inflammatory medication and a couple of weeks of lighter activity could be all one needs. However, if the pain continues for more than a couple of weeks, it deserves to be evaluated. Because the rotator cuff is under tension, tears generally get bigger over time and partial tears can become full-thickness tears. It’s possible for the rotator cuff to eventually become irreversibly torn.

There are a variety of things that can be done non-operatively to get people feeling better. Oftentimes, physical therapy is all that’s necessary. Sometimes an injection is useful to break the cycle of pain and irritation that leads to rotator cuff dysfunction. Cortisone can relieve the pain and allow the normal shoulder mechanics to return. In a future issue, we’ll discuss surgical repair for rotator cuff disease.

Rotator cuff conditioning

It’s one thing to be an 18- or 20-year-old, working out in the weight room or on the ball field: you can get away with almost anything. But those of us who are 30, 40 or above, need to be diligent about preventive conditioning. Keeping your rotator cuffs healthy and strong will avoid future problems.

Maintaining good posture—a military-style bearing, shoulders up and back with no slouching—is helpful. There are rotational exercises that strengthen the muscles of the rotator cuff. Many people who work out have a tendency to concentrate on the muscles you can see—the chest, pecs and triceps—but they neglect exercises for the back or rotator cuff. It’s best to avoid isolating the shoulder with heavy bench-pressing unless you are balancing the effort with rotator cuff and back exercises, a necessity for achieving long-term shoulder health.