

Shoulder pain?

*A rotator cuff
injury could
be to blame.*

By Erin Bishop

You don't have to be an athlete, or elderly, to injure your shoulder. People 17 to 70—in fact, anyone of any age—can experience that sudden jab of pain, or that nagging long-term ache, which spells trouble.

That was a lesson Vicky Garrison, 58, of Grottoes, learned when she suffered with chronic pain in her right shoulder several years ago. The pain, she reports, started gradually and over time increased in severity. Garrison knew she had not experienced a sudden, acute shoulder injury, so she attributed the nagging pain to “the regular wear and tear” that goes with aging.

“I’m not one to run to the doctor for pain,” she says matter-of-factly.

But after eight months of treating herself with over-the-counter pain medications, the pain was still there. Garrison decided to seek professional medical help.

“Because I waited to see the doctor, part of the extent of my injury was my own fault,” she concedes. “It would not have been as bad if I’d seen the doctor sooner.”

The least stable joint in the body

The shoulder is unique in both structure and function. “Of all the joints in the body, the shoulder allows the greatest variety of motions in the most directions,” explains Todd Battaglia, MD, MS, an orthopedic surgeon with Hess Orthopaedics and Sports Medicine in Harrisonburg.

However, the increased mobility afforded by the shoulder comes with a price. As Dr. Battaglia explains, the shoulder’s structural versatility makes it the least stable joint in the body. That means shoulder injuries are very common. In fact, as the National Center for Health Statistics reports, each year more than 13 million Americans seek medical treatment for shoulder problems.

Most shoulder problems result from three causes—injury, arthritis and tendinitis. Shoulder injuries also generally involve muscles, tendons or ligaments rather than bones, Dr. Battaglia notes.

Understanding the rotator cuff

One of the most problematic shoulder injuries—causing pain, frustration and inconvenience—is the tearing of muscles and tendons of the rotator cuff.

The rotator cuff is a group of four muscles and their associated tendons that surround the shoulder, explains Dr. Battaglia. “Each of these muscles starts at the shoulder blade, wraps across the shoulder and attaches to the upper arm bone. The muscles of the rotator cuff are some of the primary movers and stabilizers of the shoulder. They’re responsible for moving the shoulder forward, out to the side and in a rotational direction,” he says.

There are two distinct types of rotator cuff injuries. One type results from an acute or traumatic injury, such as a fall or an athletic injury. The other type comes from repetitive overuse of the shoulder or degeneration of the tendon over time.

“Most commonly,” Dr. Battaglia says, “we see older folks with rotator cuff injuries resulting from overuse. Younger patients tend to be those who have suffered acute or traumatic injuries and have had no previous shoulder problems.”

There’s a range of severity with injuries of the degenerative or overuse type, Dr. Battaglia explains. This type of injury usually begins with tendinitis and inflammation. Then, as the injury progresses, the rotator cuff itself becomes torn. “Depending on

an individual’s pain tolerance,” he says, “patients seek medical treatment at various stages of injury.”

Symptoms of rotator cuff injuries

Pain is the most common symptom of a torn rotator cuff. “It may be difficult for patients to pinpoint their pain to a specific area,” Dr. Battaglia says. “Instead, patients often describe their pain as a generalized discomfort made worse by specific movements of the shoulder.”

Depending on the severity, a rotator cuff tear also may result in decreased strength. This is often marked by the patient’s inability to lift his or her arm above the head. Garrison says her shoulder eventually became so weak and sore that she could not reach above her head.

Because of decreased mobility in the shoulder, people with a torn rotator cuff may complain about the frustration they experience in performing even simple daily activities. Tasks like brushing the hair, lying on the injured shoulder, reaching in overhead cabinets and lifting heavy objects become a real challenge.

“The pain got so bad that I couldn’t do anything with that arm,” Garrison says. “At one point, I borrowed a hedge trimmer to do some gardening, but I couldn’t lift it with my right arm.”

When to consult a physician

Because shoulder pain is common, many people attempt to treat themselves at home with rest, ice and over-the-counter pain medications and anti-inflammatories. Dr. Battaglia recommends that people treating their symptoms at home also avoid activities that cause shoulder pain, or at least perform these activities more carefully. At-home remedies often provide relief for moderate, temporary shoulder pain caused by over-exertion.

However, he adds, if shoulder pain becomes chronic—lasting several weeks or, as in Garrison’s case, several months—then tendinitis or a chronic rotator cuff tear may be to blame.

Dr. Battaglia advises people with symptoms of a torn rotator cuff to see their physician as soon as possible. This advice is especially important for people who experience sudden, severe shoulder pain from an acute injury. Seeking prompt medical attention often helps the patient avoid further injury to the shoulder. A patient’s primary care physician can usually determine the best course of action, instructing the patient either to treat the pain at home or to see an orthopedist for specialized treatment.

Diagnosing and treating rotator cuff tears

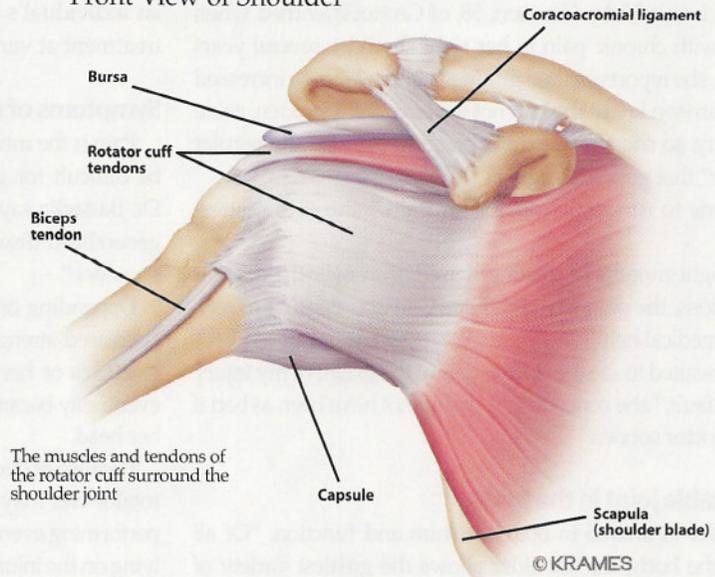
The diagnosis of a rotator cuff injury depends upon the patient’s medical history and a physical examination. “We can generally determine the type and extent of injury by learning when and how a patient’s shoulder pain began,” Dr. Battaglia says. “We also ask about activities that are more or less painful for the injured shoulder.”

Also important in diagnosis are X-rays and magnetic resonance imaging (MRI). X-rays show the boney structure of the shoulder. They allow physicians to see bone spurs or other factors that might be irritating the rotator cuff, Dr. Battaglia explains. MRI shows soft tissue, such as tendons and muscles.



Todd Battaglia, MD

Front View of Shoulder



Treatment depends upon the extent of injury and the types of activities a patient needs, or wants, to participate in. "Given these factors," says Dr. Battaglia, "treatment varies for each patient. Treatments range from physical therapy and strengthening programs, to cortisone or steroid injections, to surgical repair."

For patients suffering from inflammation or tendinitis, cortisone injections provide pain relief and decreased inflammation. Relief of these symptoms "often allows patients to undergo physical therapy. The therapy strengthens the shoulder so that the rotator cuff is no longer irritated," Dr. Battaglia says.

According to the American Academy of Orthopaedic Surgeons, research shows that, unless a large cuff tear exists, early surgical repair offers no advantage over attempting non-surgical treatments first. Therefore, most orthopedic surgeons initially take the "conservative," non-surgical approach to treatment. Surgery becomes an option for patients whose rotator cuff pain cannot be managed by non-operative means, or for those with a full-thickness tear.

If rotator cuff surgery becomes necessary, the orthopedic surgeon may choose from a variety of techniques. These range from "open repair" to minimally invasive arthroscopic surgery. The technique used depends on the patient's needs and the surgeon's preference and expertise.

"These surgical techniques all aim for the same goal—to attach the tendon back to the bone from which it was torn, thus restoring normal function and reducing pain," says Dr. Battaglia. He adds, however, that as many as 90 percent of patients with shoulder problems "greatly benefit from non-surgical treatments, including medication or injections, physical therapy and strengthening exercises."

In Garrison's case, physical therapy and cortisone shots in her shoulder did not help. At that point, her family doctor sent her to Hess Orthopaedics and Sports Medicine, where she saw orthopedic surgeon Douglas Hendren, MD. An MRI revealed degenerative joint disease and the presence of bone spurs that were irritating her rotator cuff.

"When my orthopedic surgeon saw the bone spurs, he told me surgery was the only option," says Garrison.

In November 2004, Dr. Hendren performed open surgery on her shoulder to remove the spurs and repair the damaged rotator cuff.

After surgery—recovery and rehab

If surgery is performed, the first stage in recovery is resting the arm to let the repaired shoulder heal. During this time, patients use a special sling to immobilize the shoulder. The sling that Garrison used after surgery, she says, included a pillow that she rested her arm on.

Within a week to 10 days after surgery, patients typically follow up with their surgeon and then begin a rehab program with a physical therapist.

The first four to six weeks of rehab involve exercising the fingers, wrist and elbow of the repaired arm, Dr. Battaglia explains. During this time, the shoulder remains immobilized to allow the repaired tendon to continue to heal. Any movement of the shoulder is strictly passive, performed by the physical therapist, or by the patient using the other arm.

Typically, after the repaired tendon has had ample time to heal, the next six to 12 weeks of rehab focuses on range of motion exercises and on progressively strengthening the shoulder.

After 12 weeks of rehab, Garrison returned to her job at Alcoa. "I worked in customer service and so I was almost exclusively on the computer and not lifting anything," she says. "But the rehab people still gave me a lightweight sling to keep me from unconsciously picking things up that I shouldn't."

By four to six months following surgery, most patients regain functional strength and mobility in their shoulder. "At that time," Dr. Battaglia says, "they can successfully resume pre-injury athletic involvement and occupational duties."

Dr. Battaglia emphasizes that a "strong commitment to rehabilitation" is important to achieve a successful surgical outcome.

Garrison agrees that dedication to the rehab process pays off. "I "terrible pain" she experienced from her injury is now just a distant memory. ■