In a recent survey of common injuries plaguing archers, the number two villain behind shoulder pain was elbow pain. Some of you may have noticed an ache or tenderness on the outside of your elbow after only a few shots, while others may not be able to pull the bowstring back at all because of the pain. What you may have is a case of tennis elbow. Fortunately, with a few easy exercises and a modification to your pull, you'll be back on the range in no time.

What is Tennis Elbow Exactly?
Tennis elbow, or lateral epicondylitis as it's called in medical-ese, is tenderness and pain on the outside (called the lateral side) of the elbow, specifically in the band of muscles that cross over the elbow joint to connect into the upper arm (the humerus). These muscles are called extensors, as their job is to pull your wrist backwards (extension) as if you were holding a tray overhead. Tennis elbow is an easy condition for tennis players to encounter since swinging a tennis racquet involves pulling the racquet powerfully backwards before swinging forward. In archers, the main cause is by not exclusively using your large, powerful muscles to draw the bowstring, but bending the wrist as you pull your elbow back.

Keep in mind that there may be other causes of the elbow pain: cervical spine problems brought on by poor posture, compression of the radial nerve as it travels down to the muscles in the wrist and hand, or degeneration of the joint between the radius and humerus bones. A couple of simple tests can be used to determine if you have tennis elbow: 1) Stick your arm straight out in front of you, palm down. Have someone push gently down on your wrist while you try to bend it backwards. Pain will occur at your elbow if you have the condition; 2) In the same position as number 1 with your palm facing down, gently pull your wrist down to stretch the back of your forearm. There won't be much flexibility in your wrist and there may be pain at the elbow; 3) Again, in the same starting position, with the palm down, have someone push against the back of your fingers while you try to push them up to the ceiling. Again, pain will occur at the elbow if you have the condition.

What I discuss in this article is directed towards tennis elbow specifically and should improve your pain. If it does not, an x-ray may be needed to rule out arthritic changes in the joint.

How to Correct It
It has been my experience that the majority of problems with athletes and their sports is corrected by using proper form. So the first thing you should do is have someone watch your form and make sure that the back muscles are doing the work, and that your wrist is not bending backwards as you draw on the string.

Next is rest and ice. You are only allowed to work and shoot with that elbow as long as you do not cause an increase in pain. Use an ice pack for 10-15 minutes on the area, 2-3 times a day. Even better is to take a dozen Dixie cups, fill them with water and put them in the freezer. When frozen, rip off a little bit of the paper and give the area an ice massage for about 8 minutes, until it goes numb. Do this 2-3 times a day. Keep the ice handy, because after you do your exercises, you're going to ice the elbow down.

I'm a big fan of Therabands or rubber tubing to do the exercises with. If you don't have them, very light dumbbells will also work. Once you can hold your arm straight out and push your wrist up against someone pushing down without
seeing stars from the pain, then you can start using the Therabands or dumbbells.

**Extensor Stretch**
Hold your left arm straight out in front, with your palm down. Keeping that elbow straight, reach across with your right hand and gently pull down on the back of your left hand. You should feel a stretch down the back of your arm and across your elbow. Hold the stretch for 30 seconds, then relax and do the same on the other side for 30 seconds.

A variation of this is to gently push up with the back of your left hand against the resistance, counting to seven, then relax and let the right hand stretch the left. Repeat this three times.

**Wrist Extensions**
Sit with your arm stretched out in front of you, palm down, your elbow supported on a table or desk. Tie the Theraband around your foot and hold the other end in your hand, or use a light weight (pictured below). Pull your wrist backwards like you’re revving a motorcycle. Hold it at the top for a count of two, then slowly lower your hand, counting to five. Do this twelve times.

**Rope-Ups**
This is a great exercise for strengthening your wrist extensors, but not one to attempt unless you have a full range of motion that is relatively pain-free.

For this you need a bar, a piece of rope as long as you are tall, and a light weight. Tie one end of the rope around the bar, the other end through the weight. Standing or sitting with your arms outstretched and your elbows supported, roll the bar in your hands, winding the rope up and lifting the weight all the way up to the bar. Once at the top, go in reverse, slowly lowering the weight to the floor. The key here is to get a full range of motion in your wrists while keeping your elbows straight: bend your wrist all the way down to turn the bar up, and bend it all the way back before the other wrist bends forward to grab the bar and pull it up.

**Consistency is the Key**
An effective elbow rehabilitation program starts with a consistent exercise routine, stretching before and after shooting, with ice and rest important for repair and recovery. While this article demonstrates the exercises with light weights, always start with therapeutic bands or tubing, exercising in a limited, pain-free range of motion, building to a full range as the pain subsides. If at any point the exercises cause an increase in pain, notably one that does not go away with rest, immediately stop and reassess your motion. I always encourage the use of mirrors or video cameras, so that you can actually see what the muscles are doing and if your form can be improved.

Also, if after a trial of exercise and rest the pain is getting worse or simply not improving, make an appointment to see an orthopedist or chiropractor to rule out something more serious.

Dr. Jeff Marsick is a Certified Chiropractic Sports Physician and nutritionist in private practice in Fairfield, CT. A former Coast Guard officer, he also has a background as a personal trainer. Self-taught, he has been shooting off and on for seven years, but soon hopes to start shooting competitively. Lessons might not be a bad idea, either.