

Patient information: Elbow tendinopathy (tennis elbow)

INTRODUCTION

Tendons are tough bands of tissue that connect muscles to bones. There are several types of tendon problems (called tendinopathies):

- Repetitive activities and sudden trauma can injure tendons and lead to inflammation, pain, and difficulty using the joint. This is called **tendinitis**.
- As people age, tendons can break down (degenerate) or even tear; this is called **tendinosis**. Symptoms of tendinosis usually last more than a few weeks.
- Less commonly, tendon problems can be caused by other conditions, including rheumatic diseases.

Tendinopathies are common problems. The risk of having a tendinopathy increases with age and is greater in people who routinely perform activities that require repetitive movement that increases stress on susceptible tendons.

Treatment of tendinopathy focuses on resting and protecting the injured tendon so that it can heal, inflammation can resolve, and muscle strength can improve. In most people, tendinopathy resolves with little or no treatment.

Tendinopathy can affect many different tendons in the body.

WHAT IS ELBOW TENDINOPATHY?

Tendinopathy (tendinitis or tendinosis) is the most common condition affecting the elbow.

- It is called "tennis elbow" or lateral epicondylitis when there is an injury to the outer elbow tendon
- It is called "golfer's elbow" or medial epicondylitis when there is an injury to the inner elbow tendon

However, elbow tendinopathy can be caused by sports other than golf and tennis, as well as work-related activities that involve heavy use of the wrist and forearm muscles.

ELBOW TENDINOPATHY SYMPTOMS

Elbow tendinopathy most often affects the dominant arm (ie, the right arm in people who are right-handed, etc).

Symptoms include:

- Pain in the elbow that spreads into the upper arm or down to the forearm
- Weakness of the forearm
- Pain can begin suddenly or can develop gradually over time
- You might have a harder time with activities that require arm strength, including sports that require you to hit backhand or throw a ball

ELBOW TENDINOPATHY TREATMENT

Pain relief — If needed, you can take a pain medicine, such as acetaminophen (sold as Tylenol® and other brands), ibuprofen (sold as Advil®, Motrin®), or naproxen (sold as Aleve®). You should not take more than 4000 mg of acetaminophen per day. If you have liver disease or drink alcohol regularly, you should speak with your doctor or nurse before taking acetaminophen.

Arm brace — A tennis elbow brace or strap applies pressure to the muscles of the forearm, reducing pressure on the injured tendon in the elbow. You can use the brace or strap while working or playing sports. Apply the brace so that the cushion is resting on your forearm muscles, about 3 to 4 inches (10 cm) from the tip of the elbow bone. You may need to wear the brace for up to six weeks. Avoid wearing a wrist splint (which prevents your forearm from moving).



3100 23rd St. Suite T. Columbus, NE 68601 Phone: 402-562-5400 www.columbusurgentcare.org

Flexibility exercises — Flexibility exercises can help to improve your arm's strength and ability to move.

Tennis elbow — While standing or sitting upright, hold your injured arm straight out in front of you and point your fingers down toward the ground. With the hand of the uninjured arm, grasp the hand of the injured arm, thumb pressing on the palm, and try to bend the wrist further. Hold for 30 seconds; repeat three times. Perform this stretch daily.

Golfer's elbow — Stand at arm's length away from a wall, with the affected arm closest to the wall. Place the palm against the wall with the fingers pointing down. Apply gentle pressure to the hand. Hold for 30 seconds; repeat three times. Perform this stretch daily.

Strengthening exercises — A special type of strengthening exercise, known as "eccentric strengthening," is the most effective way to treat elbow tendinopathy. Patients can start these exercises once their flexibility has improved and they have little or no pain when performing a strengthening exercise. Eccentric strengthening involves working the affected wrist extensor tendon and muscle while they are lengthening. Patients can use a weight, elastic band, or a specially designed rubber bar to do these exercises, and they may be done under supervision or independently. Eccentric training was superior when compared to other types of strengthening.

Tennis elbow — People with tennis elbow should perform eccentric **extension** exercises. You should expect to feel some mild discomfort with these exercises. If the pain becomes sharp or is more than moderate, stop the exercise and rest for two to three days. Restart with fewer repetitions.

Golfer's elbow — Golfer's elbow is treated with eccentric **flexion** exercises. You should expect to feel some mild discomfort with these exercises. If the pain becomes sharp or is more than moderate, stop the exercise and rest for two to three days. Restart with a lighter weight or fewer repetitions.

Sit with your arm supported (on a table) at shoulder height. The back of your hand should face the floor, and your hand should hang off the table. Start with your elbow bent, which is less painful, then progress to keeping your elbow straight. Hold a 1 pound weight in the hand. Using the unaffected hand, lift the hand with the weight toward the body (keep the arm flat against the table).

Move the unaffected hand away, and slowly allow the affected hand (with the weight) to drop. Repeat 15 times, then rest one minute. Repeat two more times. Perform five times per week.

After one week, try to lift the hand with the weight without assistance. Increase the weight by 1 to 2 pounds per week. Do not increase the weight unless you can complete 15 lifts.

Kinetic chain — If you play a sport that requires arm strength (such as tennis or golf), hold a 1 to 2 pound weight in your hand and reproduce the wrist and elbow motions of your sport. At the same time, brace your lower body and core (back and abdomen) muscles.

Then, replace the weight with a golf club or tennis racket and practice your swing (without the ball). If you do the exercises incorrectly, you may feel more pain. If you have pain with strengthening exercises, consider seeing a rehabilitation specialist, such as a physical therapist or athletic trainer, to help supervise your recovery.

When will I feel better? — Most people respond well to treatment. You might have some pain during work or sports for up to 6 to 12 weeks. Some people will need formal rehabilitation with a physical therapist.

If your pain persists, an injection into the painful tendon might help to relieve pain. In addition, there are many new treatments being developed to promote tendon healing, such as using blood products, shock wave therapy, acupuncture, and nitroglycerin patches. Surgery is not usually needed unless symptoms have not improved after six or more months of treatment.