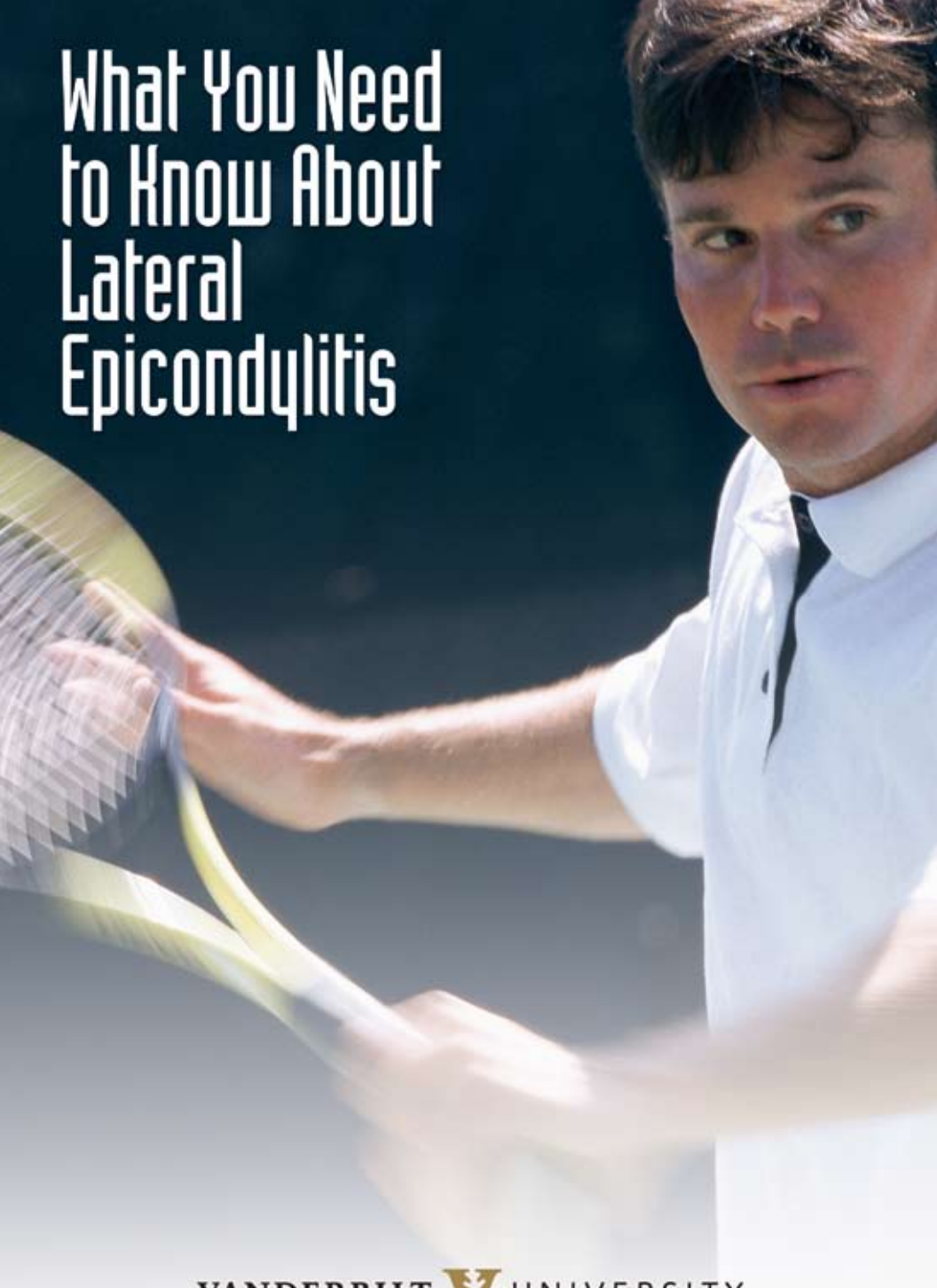
What You Need to Know About Lateral Epicondylitis



VANDERBILT UNIVERSITY

MEDICAL CENTER

Our Core Purpose

To improve the lives of others through science, education and clinical skill.

Our Core Values

- Everything you do must enhance the athlete/patient experience, thereby improving the reputation of VSM.
- Work with the highest honor and integrity.
- Check your ego at the door. “Team” before “I”--Ask not what VSM can do for you, but what you can do for the Department.
- Lead the field of Sports Medicine with research that will improve the practice of the disciplines in our department.
- Strive to be leaders in education for care givers, patients, and the community.
- Treat each athlete/patient as we would treat our own family.

Our Physicians

All of our physicians at VSM have completed an accredited fellowship in sports medicine due to the specific needs of our field. These fellowships usually last one or two years and give the physician a chance to improve their skills and gain more experience in the specialty of sports medicine. Our physicians continue to expand their expertise in this field through continuing education and participation in sports medicine organizations. Some of the organizations include the American College of Sports Medicine, the American Orthopaedic Society for Sports Medicine, the American Orthopaedic Association, and the American Medical Society for Sports Medicine.

What Is A Physical Therapist?

Physical Therapists are healthcare professionals who evaluate and treat people with healthcare problems resulting from injury or disease. In today's healthcare system, Physical Therapists are experts in the examination and treatment of musculoskeletal and neuromuscular problems that effect daily functional abilities as well as recreation/sports abilities. Physical Therapists assess joint motion, muscle strength/endurance, and performance of activities required in daily living.

The minimum educational requirement is a post-baccalaureate degree from an accredited education program. The majority of programs offer a master's degree, but a growing number of programs offer the Doctor of Physical Therapy (DPT) degree. Candidates must pass a state administered national exam as well as maintain annual continuing competency/licensure requirements.

What Is A Certified Athletic Trainer?

Certified athletic trainers (ATCs) are medical experts in the prevention of athletic injuries; recognition, evaluation and immediate care of athletic injuries; and rehabilitation and reconditioning of athletic injuries. Athletic trainers can help you avoid unnecessary medical treatment and disruption of normal daily life. The American Medical Association recognizes athletic training as an allied health care profession.
In addition to athletic injury rehabilitation, Vanderbilt Sports Medicine provides athletic training services for Vanderbilt and Belmont Universities as well as local high schools. The American Medical Association recommends that a certified athletic trainer be in every high school. The minimum educational requirement is a bachelor's degree and being certified by the NATA Board of Certification (NATABOC). In addition to certification, athletic trainers must meet individual state licensing requirements in a growing number of states.

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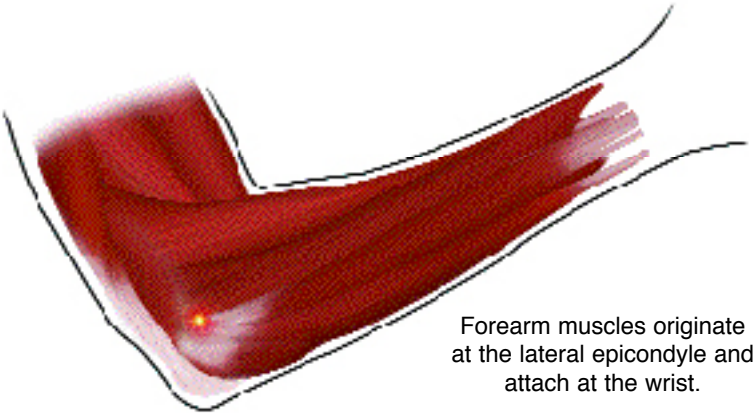
What is Lateral Epicondylitis?

Lateral Epicondylitis, also known as “Tennis Elbow,” is a condition with pain and tenderness of the tendons at the bony prominence at the outside of the elbow. This bony prominence is called the lateral epicondyle, hence the name ‘lateral epicondylitis.’ The wrist and finger muscles originate at the lateral epicondyle and attach at the wrist and fingers. Lateral epicondylitis may present with recurring pain and tenderness radiating down the forearm. A simple handshake may be painful. The pain often affects the ability to complete normal activities of daily living including lifestyle, work, recreation, sports, and basic self care tasks.



Forearm muscles originate at the lateral epicondyle and attach at the wrist.

Symptoms may include:

- Pain on the outside of your elbow while trying to lift or grasp a small object or while shaking hands.
- Frequent dropping of objects.
- Difficulty and/or pain with turning motions such as the motion used in turning doorknobs or keys.
- Pain in the forearm and inability to fully straighten your elbow.
- Decreased strength of the affected arm.

What Will Your Physician Do?

Your physician will perform a thorough examination of your upper extremity, medical history, and specific testing to determine if you do have lateral epicondylitis. Your physician will want to know how your symptoms are interfering with your lifestyle, work, recreational, and sports activities. It is also important to inform your physician how long the symptoms have been occurring, how the pain originated, and any actions which cause pain.

Your physician may prescribe an oral anti inflammatory medication or may recommend a cortisone injection. These medications are designed to decrease your pain so that you progress and improve the function and strength in your arm. Your physician may also prescribe a series of therapy sessions to address your pain, decreased motion, decreased function, and decreased strength.

What Will You Do In Therapy?

Your Initial Visit:

Your therapist will perform a physical evaluation to determine your level of pain, function, range of motion, strength, and daily activities. Your therapist will want to know exactly where your pain is, what brings it about, and how often it occurs. It is important that to tell your therapist about your daily tasks so that an individualized program may be created to address your physiological needs. Your therapist will cover the stages of the rehabilitation process for lateral epicondylitis and educate you on the P.R.I.C.E. approach (see page 5) for treatment. Then you and your therapist will set specific goals to work on together during the therapy process. The therapist will inform you about a typical therapy session and what to expect during the session. With any therapy session communication between the patient and therapist is very important. Always ask questions or explain concerns about your therapy and its direction. Consistency is the key to good therapy results. Your physician and therapist will communicate regularly to ensure the success of your treatment.

Stages of Rehabilitation

Goals and Treatment

Stage 1: Acute Phase

1. Control swelling / pain: The P.R.I.C.E approach is initiated at this stage to quiet down pain and to allow the tissue to rest and begin healing. Modalities such as heat, ice, ultrasound, and iontophoresis are introduced by your therapist at this stage to decrease pain to the involved tissue and to promote healing of the tissue.
2. Range of motion: Gentle exercises to the wrist and elbow are initiated at this stage and performed in a "pain free" range of motion. Hand, shoulder, and scapula exercises may be performed as well.
3. Bracing: A wrist extension splint or counterforce brace may be used to rest the tissue and relieve excessive loading of the tissue.

Stage 2: Restorative Phase

1. Range of motion: Continue with active exercises for the upper extremity to promote full range of motion in all joints.
2. Stretching: Stretches are introduced and performed at the frequency directed by your therapist.
3. Strengthening: Begin grip strengthening with the use of a ball. Elbow strengthening may be introduced at this stage, with the use of light exercise bands or low weights.
4. Bracing: Counterforce bracing may continue during this phase to continue lowloading of the involved tissue.

Stage 3: Advanced Phase

1. Advanced strengthening: Progressive strengthening with exercise bands and increased weights
2. Lifestyle, work, recreational, and sports activities: Initiate therapeutic activities that model activities of daily, work, recreational, and sports activities.
3. Return to daily activities.
4. Discharge from therapy.

The P.R.I.C.E. Approach

Protect the affected joint: Try to alter daily activities to protect the injured area and to avoid further injury. Discontinue particular sports that may aggravate the condition until the you enter into advanced stage of the rehabilitation.

Rest the elbow: Rest the injured tissue by wearing splinting or bracing provided by your therapist.

Ice the involved area: Apply ice to the area of pain and swelling to decrease pain. This may be applied two to three times per day for sessions lasting up to 10 minutes.

Compress the joint: An elastic wrap or ace bandage may help to decrease swelling.

Elevate the arm: Elevate the arm above your heart level as needed. This will prevent swelling and aid in reducing pain.

Therapy Visits

There are many strategies to combat pain associated with lateral epicondylitis. Your therapist will recommend specific stretches and tasks for you to perform at home. Tissue mobilization, modalities, splinting, and strengthening will be incorporated into your therapy session for your particular rehabilitation needs.

Modalities:

Modalities are therapeutic approaches selected to reduce and to relieve pain to injured tissue and assist in healing. These techniques are effective and comfortable and based on scientific research. Your therapist will discuss with you the procedures of the modalities prior to using them.

Tissue Mobilization:

Tissue mobilization is a technique used to promote tissue healing. This technique may be used at each session to provide pain relief. It is important that you let the therapist know how you feel during these techniques.

Education:

Your therapist will also provide you with education on adapting the environment and supply you with tips for preventing over use of your injured arm. It is important that you perform your daily activities without aggravating the tissue or increasing pain.

Rest:

Rest through splinting may be used to aid tissue healing. This will be determined by your therapist. It is always important that the splint be worn as recommended by the therapist. It is important that you let your therapist know how the splint feels and fits during the day.

What to do at Home

Your therapist will create a personal home exercise program for you. This may include adaptive equipment usage, splinting, stretches, strength training, ice treatments and adapting your activities. The home program is necessary to continue the therapy process after you have left the clinic. The exercises and goals will be changed as you improve. Communicating with your therapist about your home program is very important. Always feel free to ask questions about all aspects of the home program.

Activity Modification

You may need to modify your activities during your recovery process. Your physician and therapist may recommend these modifications:

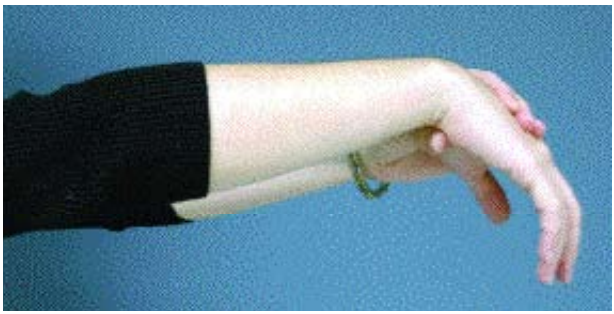
- Avoid one handed lifting: Distribute lifting to both hands.
- Avoid lifting or picking up items with palm facing down: Lift and pick up items with palm facing up
- Avoid excessive gripping: Switch off between both hands to distribute the work.
- Avoid working with a “cold” muscle: Perform gentle manual massage with your opposite hand for a few minutes before you begin stretches on your affected arm.
- Avoid over-reaching: Reaching with the arm fully straight is over-reaching. Over-reaching could force you to use aggravated muscles. Try to reorganize your work areas so that items you frequently use are within a close reach. Avoid placing heavy items in locations that would require reaching overhead.

Stretching Techniques

Stretches for lateral epicondylitis will begin during the restorative stage of the rehabilitation process. Your therapist will educate you in the proper positioning, the duration of the stretch, and the frequency of your stretching program. It is very important that you follow the guidelines for the stretches to ensure your success.

The stretching exercise may be completed while sitting or standing.

- Fully extend the injured arm with the elbow completely straight
- Allow the wrist to relax and the hand to drop gently with the palm down.
- While maintaining the position of the injured extremity, take the opposite hand and press gently on the back of the hand on the injured side. Take the stretch to the point of pain and hold.
- Initially you will hold the stretch for up to 10 seconds and gradually advance up to 30 - 45 seconds. Never hold the stretch for more than 45 seconds. Your therapist will probably suggest that you complete 10 -15 of these stretches three times per day, depending on you pain level.
- Always ask your therapist questions or concerns regarding the stretches and any aspect of your rehabilitation process.



Your Counterforce Brace

The counterforce brace is designed to decrease the force placed on the painful tissue at your elbow. When worn properly, the brace re-directs the force generated with extending the wrist and digits from the involved tissue to the area under the brace. This will allow the tissue to continue to rest and heal. The counterforce brace should be worn snuggly to the muscle mass of your forearm. Your therapist will educate you on proper placement of the brace. Keep in mind that the brace should rest on your forearm about three fingers width away from the bony prominence. Check the fit of the brace throughout the day. This brace brace is not designed to be worn at night. Discontinue use if you feel more pain with the brace than without the brace.

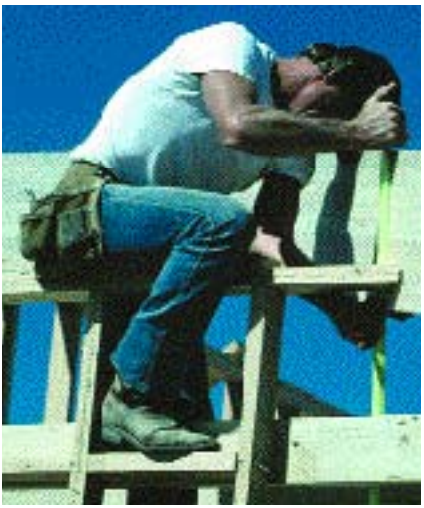
To wear the counterforce brace:

1. Use your unaffected hand to find the bony prominence at the outside of your elbow.
2. Place the index finger of the unaffected hand at this bony prominence.
3. Hold your index finger on that spot and lay your middle, ring and small finger toward the muscle mass in your forearm.
4. The edge of counterforce brace should begin at the outer edge of the small finger and rest on the muscle mass.
5. Remember to wear the counterforce brace “snuggly” to the muscle mass.

Again, your therapist will properly educate you on the placement to ensure success.

Return to Work & Function

The types of activities you participate in will determine when you may return to these activities. The rehabilitation team will help you attain pain-free motion, strength, and daily activities to meet your particular lifestyle needs. After this has been attained, it is important to continue with your home program to insure maximum upper extremity functioning. A lifestyle of fitness will also help prevent future problems. Your rehabilitation team will advise you on this step.



Tips For Golfers:

- Graphite shafts and low compression balls are available to avoid high impact strain to the elbow.
- Ease the grip on the club during the swing
- During the backswing, bring the club back slowly.
- Evaluate the surroundings for rocks, tree roots, and sprinklers prior to the swing to avoid contact.

Tips For Tennis players:

- Consider using a forearm brace during play.
- Play the backhand with the arm, not the wrist.
- Remember to use correct form and technique.
- Make sure that the racket strings are not too tight.

- Make sure the balls are dry.
- Consider a lighter racket for play.
- Consider a change in the grip size of the racket handle.

Make sure that your physician has cleared you to participate in any sporting activity while you are undergoing therapy.

Tips For Daily Activities

- Avoid over-reaching. Place frequently used objects close and at counter level.
- Look at the weight of objects. Lift half as much as you regularly do.
- When lifting, either use the unaffected arm or perform a two handed lift.
- Avoid repetitive pulling with the injured arm, such as unloading the washing machine and dryer, raking leaves, and pulling weeds.
- Avoid opening jars or bottles that have tight lids.
- Try to use the unaffected hand for turning actions, such as doorknobs. Be aware of the amount of grip you are using for actions and try not to use too much force.
- Be cautious of handling or moving glass objects with the affected hand, to avoid dropping and breaking glass.
- Lift under objects rather than pull them up.

Contact us!

Vanderbilt Sports Medicine
Medical Center East, South Tower, Suite 3200
1215 21st Avenue South
Nashville, TN 37232-8828

For more information on this and other injuries see our website: www.vanderbiltorthopaedics.com

January 2010: Jim Lassiter, Michelle Johnson, TJ Recinella, and Peggy Haase. Vanderbilt Rehabilitation Services