

# Ulnar Neuropathy

## **What is ulnar neuropathy?**

Ulnar neuropathy is an inflammation of the ulnar nerve, a major nerve in your arm that runs down into your hand. It supplies movement and sensation to your arm and hand. Ulnar neuropathy causes numbness, tingling, or pain into the arm and hand on the side of the little finger. Bicyclists call this condition handlebar palsy.

## **How does it occur?**

The ulnar nerve may get inflamed in several areas as it travels from your neck to your hand. The ulnar nerve is commonly inflamed during bicycling from repeated shocks or bouncing while your hand is holding onto the handlebar. The nerve may be stretched when held in the lower position of a drop handlebar. Other activities that involve repetitive movements of the wrist may cause ulnar neuropathy such as using a computer mouse or typing. It may also occur from an injury to your elbow.

## **What are the symptoms?**

The symptoms include numbness, tingling, or pain in the forearm or hand on the side of the little finger.

## **How is it diagnosed?**

Your health care provider will ask about your symptoms and examine your neck, shoulder, arm, and wrist. He or she may refer you to a specialist to have tests done, such as a nerve conduction study (NCS) and electromyogram (EMG).

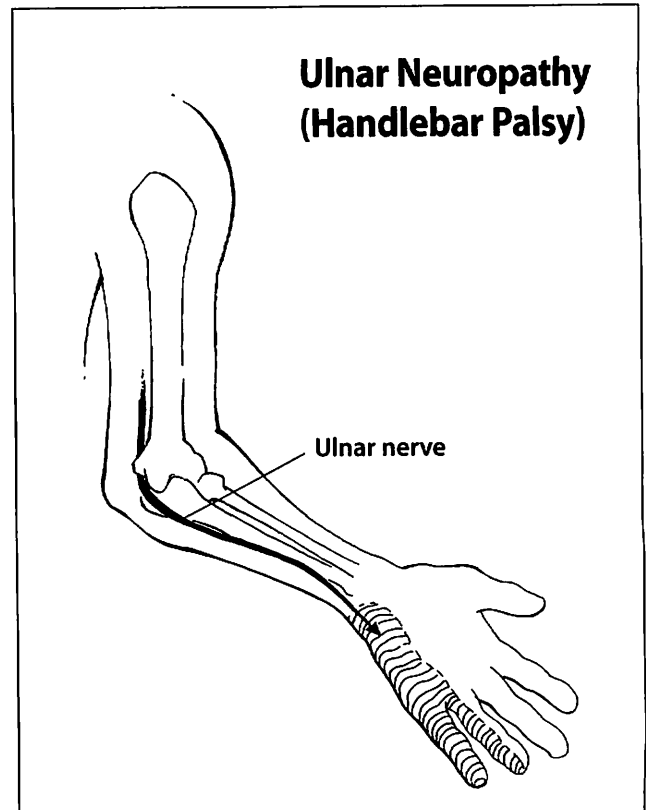
## **How is it treated?**

It is important to try to find and eliminate the cause of your ulnar neuropathy. You may be prescribed wrist splints to reduce the discomfort. When you are bicycling, it might help to wear padded gloves. You might also try adjusting the position of your hands on the handlebar, such as by changing your grip from the top to the sides of the handlebar. Your health care provider may prescribe anti-inflammatory medications.

## **When can I return to my sport or activity?**

The goal of rehabilitation is to return you to your sport or activity as soon as is safely possible. If you return too soon you may worsen your injury, which could lead to permanent damage. Everyone recovers from injury at a different rate. Return to your sport or activity will be determined by how soon your nerve recovers, not by how many days or weeks it has been since your injury occurred. In general, the longer you have symptoms before you start treatment, the longer it will take to get better.

You may return to your sport or activity when you are able to forcefully grip your tennis racquet, bat, or golf club, or do activities such as working at a keyboard without pain or tingling in your elbow or hand.



## How can I prevent ulnar neuropathy?

Ulnar neuropathy is caused by activities that inflame the ulnar nerve. Try to eliminate activities that cause

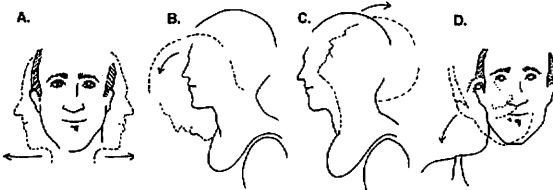
repetitive motion of the wrist, which can irritate your ulnar nerve. When you are bicycling, change your hand position on the handlebar frequently.

# Ulnar Neuropathy (Handlebar Palsy) Rehabilitation Exercises

You may do all of these exercises right away.

## 1. NECK RANGE OF MOTION EXERCISES

- A. **NECK ROTATION:** Sit in a chair, keeping your neck, shoulders, and trunk straight. First, turn your head slowly to the right. Move it gently to the point of pain. Move it back to the forward position. Relax. Then move it to the left. Repeat 10 times.
- B. **NECK SIDE BEND:** Tilt your head so that your right ear moves toward your right shoulder. Move it to the point of pain. Then tilt your head so your left ear moves toward your left shoulder. Make sure you do not rotate your head while tilting or raise your shoulder toward your head. Repeat this exercise 10 times in each direction.
- C. **NECK FLEXION:** Bend your head forward, reaching your chin toward your chest. Hold for 5 seconds. Repeat 10 times.
- D. **NECK EXTENSION:** Bring your head back so that your chin is pointing toward the ceiling. Repeat 10 times.



- 2. SCAPULAR RANGE OF MOTION:** Stand and shrug your shoulders up and hold for 5 seconds. Then squeeze your shoulder blades back and together and hold 5 seconds. Next, pull your shoulder blades downward as if putting them in your back pocket. Relax. Repeat this sequence 10 times.

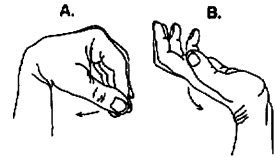


- 3. ELBOW RANGE OF MOTION:** Gently bring your palm up toward your shoulder and bend your elbow as far as you can. Then straighten your elbow as far as you can 10 times. Do 3 sets of 10.



## 4. WRIST RANGE OF MOTION

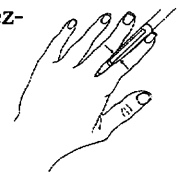
- MOTION:** Bend your wrist forward and backward as far as you can. Do 3 sets of 10.



## 5. STRAIGHT FINGER FLEXION:

- Make a right angle with your knuckles and keep your fingers straight. Hold this position for 10 seconds. Repeat 5 times.

- 6. FINGER SQUEEZE:** Practice squeezing items between each of the fingers on your injured hand. You can use paper, pens, and sponges. Hold for 10 seconds. Repeat 5 times for each finger.



- 7. GRIP STRENGTHENING:** Squeeze a rubber ball and hold for 5 seconds. Do 3 sets of 10.