

## Handlebar Palsy

Handlebar palsy is a common condition that affects new cyclists training long distances for the first time and involves the short-term loss of sensation, pins and needle type pain, and decreased muscle strength of the pinky finger side of the hand. For cyclists, this is due to the compression of the ulnar nerve, typically on the handle bar of road bikes. The ulnar nerve travels from the wrist to the shoulder. This nerve is mainly responsible for movement in the hand. When it is compressed and unable to conduct nervous system signals, cyclists can feel pain and discomfort and often relieve this by sitting up and shaking out the affected hand for relief. The condition is temporary but symptoms can last for up to eight weeks if the compression of the nerve is sustained over long periods or days without rest. What then becomes necessary is modification to bike handling, bike fit, or accessory support.

### Reasons for Handlebar palsy

There are many reasons for this condition to occur for cyclists. With your hand bent 'upwards' towards you in order for it to fit on the shifter and brake hoods of a modern road bike, you place all of your upper body weight on the ulnar aspect of your hand. A narrow handle bar for your hand size can create a pressure point that is too great to withstand. A tight grip on the bike, which is common for new cyclists, can increase the vibration and impact and compression of the ulnar nerve. Rough road conditions can also add trauma to the equation. Inability to change your hand position often can increase your chances of developing handlebar palsy as well as other postural strain conditions. Old or thin handlebar tape, lack of padded gloves, and handle bar position and your position on the bike can also affect the pressure experienced by your hands.

### What can you do?

You have options! There is a lot you can do to relieve the discomfort:

- **Bike gloves:** buy them new and with padding. This will reduce the effects of bumps on the road and lessen the point contact pressure on your hand.
- **Handle bar tape:** Retape your bike each year to ensure a comfortable ride. If needed, consider a double wrap job for extra padding or to broaden the contact if your hands are big on a narrow set of bars.
- **Ensure your seat is level or even nose-up!** If your seat nose is down, you risk increasing the pressure on your hands and will be constantly pushing yourself up and back on the seat.
- **Address handlebar width:** there are two handlebar widths, 25.0 and 31.1 mm. The smaller size is appropriate for smaller and typically female hands and was the only option years ago. The 31.1 size is standard on most road bikes now and, with handlebar tape, can reduce the point pressure on specific vulnerable places in our hands. Consider a wider or more appropriate handle bar width for your hand size.
- **Clip on aerobars:** These allow you to support your upper body on your elbows and can take the weight off of your hands completely. Be aware that this option requires confident bike handling skills and core strength and flexibility.
- **Get fitted:** A bike fit process at your local bike shop (\$100-150) could address any bigger bike size, fit, and modification questions you have -- and is a perfect interruption-free chance to ask a bike shop staff member all the questions you have about cycling!

