



**ACTIVE
LIVING**
physiotherapy

Cycling Nerve Injuries

Although cycling has a relatively low incidence of traumatic injuries, overuse and nerve injuries are more common. The most common sites of nerve injury include the hand, the pelvis, and the feet.

Ulnar Nerve Injury

The most commonly injured nerve in cyclists, the ulnar nerve runs down the inside of the palm (in Guyon's canal), and can become inflamed or compressed.



Ulnar nerve compression

Guyon's canal is an area with little space for the nerve to run through. Any irritation caused by excessive pressure or vibration can cause the nerve to be inflamed. Other names for this condition include "Handle Bar Palsy," and "Cyclist's Palsy". Symptoms consist primarily of numbness and tingling in the ring and little finger. If left untreated, this condition can lead to a loss of grip strength. To prevent such an injury, cyclists should ensure they have a proper bike fit and set up for their body size and shape. Often the handlebars are too low, the bike is too big (creating an over-reach), or the saddle tilted down too much, increasing the weight on the arms. Changing hand position frequently, increasing training volume gradually, and wearing padded gloves can all help prevent ulnar nerve injuries. Treatment consists of rest (i.e. not cycling!) until symptoms have completely resolved. Cross-training and indoor cycling without using the handlebars can be done to maintain fitness. A Physiotherapist or other health professional can recommend strengthening and stretching exercises, as well as provide anti-inflammatory modalities to speed healing time. Average recovery times range from 2-8 weeks.

Median Nerve Injury

The median nerve in the hand can also be compressed with long rides. This nerve runs down the front of the wrist, and is the nerve inflamed in Carpal Tunnel Syndrome. Symptoms consist of numbness and tingling in the thumb, index and middle fingers. Treatment is similar to that for ulnar nerve injuries.

Pudendal Nerve Injury

The pudendal nerve runs just under the pelvis in the perineal area. It is often compressed or pinched against the saddle, particularly on long rides. This condition has been termed "Bicycle Seat Neuropathy." Symptoms in women consist of numbness in the perineal area. Men may experience penile numbness or tingling, and in severe cases, impotence. Wearing good quality, multi-paneled, padded shorts can prevent such injuries. Also ensure that the front of your saddle is not too high, and that the saddle is well-cushioned. Saddles are now designed for a female or male anatomy, and often have cut-outs to relieve pressure areas. Getting up out of the saddle every fifteen minutes can help relieve long term pressure on the nerve. Treatment consists of rest, and cross training to maintain fitness. A professional bike fit should be considered. Cycling should not resume until symptoms have completely resolved

Foot Numbness

Foot numbness while cycling is usually transient and often does not result in long term nerve injury, although it can be uncomfortable while riding. The most common cause of foot numbness is shoes that are too small or too tight. Cold feet can also cause numbness, as well as poor arch support in the shoe. Occasionally, foot numbness can stem from a low back nerve being pinched. The best prevention is wearing a stiff-soled shoe with good arch support that is not too small, and not over-tightened. In inclement weather, wear neoprene booties to maintain warmth and dress appropriately. If you are still experiencing numbness, seek help from a Physiotherapist or other health professional to determine other causes of foot numbness.