Cycling Injuries

Most cycling injuries occur either traumatically (from a fall off the bike or a collision) or from overuse (often related to poor bike set-up, lack of core stability or excessive training). Common cycling injuries that can develop from a poor bike setup, excessive training or lack of core stability include:

Lower back pain

A poor bike setup with a high seat and / or low handlebars can cause ‘slump’ postures causing the spine to be quite curved which can put more strain and irritation to discs, ligaments and the sciatic nerve. Decreased back and lower limb flexibility can also lead to pain and dysfunction. Over a long period, a curved spine on a bike will result in muscles working inefficiently. This can cause spinal stability muscles to quickly fatigue, causing pain and injury in other muscles and parts of the body which are required to compensate. Cyclists who use the incorrect muscles for stabilisation and power production will often suffer back, hip and knee pain and injury. A seat that is too high or poor lumbopelvic control will also cause your hips to rock side to side, causing lateral movement through your lower back. Excessive side to side movement is both inefficient and increases the risk for overuse injuries in the back, hip, groin and knees.

Overuse or strain of leg muscles

Poor cycling technique or excessive use of hamstrings or quadriceps to compensate for lack of gluteal or core strength can result in decreased performance and predispose to injury. When looking at core strength in cycling, the focus should be on effectively recruiting the core muscles for stability so that the power generating muscles can be more effective on the bike, while decreasing the chance of overuse injury.

Knee Pain

The most common gradual onset cycling injuries tend to be knee injuries. Knee pain in cycling is often caused by incorrect seat position. A seat that is too high or too far back will increase knee extension (or knee straightening) and irritate the iliotibial band which may be felt as pain on the outside of your knee. A seat that is too low or too far forward will cause excessive knee bend and may irritate the underside of your kneecap and cause pain at the front of your knee. Asymmetry of

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the body can also cause knee pain. Cyclists with slight differences in leg length may have knee pain because the seat height is only adjusted for one side. Shoe inserts or orthotics may help correct this problem.

Neck Pain

Neck and upper back pain can be caused by poor positioning of the handle bars as well as incorrect bike size. Sudden increases in training volume can result in stress to structures unaccustomed to prolonged cycling postures, especially ‘slumped’ postures. Tight lower limb muscles can also cause ‘slumped postures’

Handlebar palsy and wrist strain

Handlebar palsy is a condition caused by compression of the ulnar nerve at the wrist against the handlebar from stabilising and weight bearing through the arms. Symptoms include pins and needles, numbness and weakness in the hands. A wrist strain may be due to a sudden force causing an acute injury, or due to overuse and excessive weight bearing through the hands, causing a repetitive strain injury. Symptoms of a wrist strain include pain in the wrist which may develop gradually or suddenly.

Foot Pain or Numbness

Foot pain or numbness can result from wearing soft-soled shoes. Cycling shoes have stiff soles that distribute pressure evenly over the pedals helps reduce localised pressure areas on the foot and may help you pedal more efficiently.

Common injuries from falls include:

Head and neck injuries, subluxation of the A/C joint or fracture of the collarbone and tears of the rotator cuff.

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