GRSM Grand River Sports Medicine Centre INJURY INFO

Cycling Injuries

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With the arrival of spring, cyclists tune up their bikes and head onto the roads and trails for another season of riding. From recreational riders to weekend warriors and competitive cyclists, injuries are relatively common and can be persistent. They can be caused by overuse, poor mechanics and of course, crashes.

Overuse Injuries:

These are chronic overload events. Rapidly increasing mileage or intensity (especially hills and big gears) may cause overuse injuries.

An important variable is **bike fit**. This includes seat height and angle, fore and aft position, cleat position and tightness, height and angle of the stem and several other items. Since women have proportionally longer legs and shorter reaches than men, they may find that a women's frame is more comfortable. Properly fitting a bike requires expertise; a certified cycling coach or health professional with specialized knowledge can help improve comfort on the bike and prevent these types of injuries.

Perhaps the most common symptom from overuse injuries is **knee pain**. It can be caused by patellar or quadriceps tendonitis, bursitis, iliotibial band syndrome or patellofemoral syndrome, among others. The root causes of the problem must be determined on an individual basis. Your family physician or a sports medicine physician can determine the source of pain, rule out more serious problems, and may prescribe certain medications like anti-inflammatories.

A thorough evaluation by a physiotherapist may include assessing the range of motion of the spinal, pelvic and lower extremity joints, muscle lengths and strengths, tone and texture of the soft tissues, and global patterns of muscle weakness and dominance. For example "Jeff", a 20- year-old mountain biker and road racer with aching pain at the front of his knees, was found to have over-developed quadriceps muscles (the muscle at the front of the thigh) and relatively weak hamstrings and gluteals (the muscles of the back of the thigh and rear end). This imbalance of muscle strength caused increasing strain and pain at the knee joint and quadriceps tendon. Physiotherapy management may include joint and soft tissue mobilization, corrective exercise prescription, activity modification, taping and pain reducing modalities.

Acute injuries:

Not keeping the rubber side down can be painful. Crashes can cause a multitude of injuries. The wrist and forearm are susceptible to sprains and fractures from landing on the hand while falling. Being unable to clip out before falling can result in falls onto the hip, leading to hip, low back and pelvic pain.

One of the most common acute injuries is shoulder sprain or strain. The acromioclavicular or "A/C" joint can be sprained by a fall directly onto the side of the shoulder. "Beth", a novice fifty-year-old mountain biker, found herself unable to clip out of her cleats and plant her foot in time to avoid a direct hit onto the side of her shoulder. A partial separation of this joint can make it difficult to elevate the arm fully or reach it across the body. There may be damage to the rotator cuff, the group of four muscles that controls the ball in the socket. In Beth's case, she had to work on regaining control and strength in the rotator cuff as well as retrain the muscles that control her shoulder blade movements.

Many injuries in cyclists can be overcome; but to avoid losing a whole season of cycling; make sure to address problems early on.

Enjoy your cycling season!

Bettina Holman, BHScPT, has developed her interest in sports physiotherapy through her work as a registered physiotherapist in the K-W and Cambridge area since 2000.