

CYCLING INJURIES



AOSSM SPORTS TIPS

Since the 1800s when bicycles first made their appearance, cycling has become popular for commuting, recreation, exercise, and sport. Today, there is an estimated 80 million cyclists in the United States. Studies estimate that of these 80 million, 48 percent experience problems with their necks, 42 percent knees, 36 percent groin and buttocks, 31 percent hands, and 30 percent back. Regardless of what you intend to use a bicycle for, there are some basic safety principles you can implement to avoid common cycling injuries.

HOW CAN CYCLING INJURIES BE PREVENTED?

Properly Fit Your Bike to Your Body

First make sure that you have a properly fitted bicycle. It's critical to minimize pain and injury! Make sure your bike seat is level. If your seat is tilted either downward or upward too much, extra pressure will be put on your arms, hands, knees, hips, and ankle, leading to stress and overuse injuries. The seat will need to be adjusted vertically and horizontally to fit appropriately. You will also need to adjust the height of your seat. In order to have a properly positioned seat, it needs to be evaluated with the pedal in the lowest position (6 o'clock) and in the horizontal position (3 and 9 o'clock). Your knee should be completely extended when the pedal is at its lowest point if your heel is placed on the pedal. Your knee will be flexed 30 degrees during the pedal stroke when the pedal is beneath the ball of your foot. With the pedals in the horizontal position, the tibial tubercle (bump just below your knee) will be directly above the middle of the pedal. Inappropriate height can result in knee pain, hip pain, or ankle problems.

Your handlebars also need to be in a proper position to avoid overreaching. Incorrect positioning may result in neck, shoulder, back, and hand pain. In general, the distance from the forward tip of the seat to the center of the handlebars should equal the distance from the tip of your elbow to the tip of the middle finger. This will allow you to comfortably use different grips on the handlebars and bend your elbows.

WHAT ARE SOME COMMON CYCLING INJURIES?

Knee Pain — The knee is the most common site for overuse injuries in cycling. Patellofemoral syndrome (cyclist's knee), patella and quadriceps tendinitis, medial plica syndrome and iliotibial band friction syndrome are a few of the more common knee overuse injuries. The first four injuries mentioned involve pain around the kneecap while the last condition results in outer knee pain. Shoe implants, wedges beneath the shoes and cleat positions may help prevent some overuse injuries.

Head Injuries — One of the most common injuries suffered by cyclists is a head injury, which can be anything from a cut on the cheek to traumatic brain injury. Wearing a helmet may reduce the risk for head injury by 85 percent. Currently, the majority of states have no laws governing the use of helmets while riding a bicycle, but helmets are readily available for purchase and typically low in cost.

Neck/Back Pain — You will most likely experience pain in your neck when you stay in one riding position for too long. An easy way to avoid this pain is by doing shoulder shrugs and neck

stretches which will help relieve neck tension. Improper form also leads to injuries. If your handlebars are too low, you may have to round your back, thus putting strain on your neck and back. If you have tight hamstrings and/or hip flexor muscles, you may find yourself rounding or arching your back, once again causing your neck to hyperextend. Stretching these muscles on a regular basis will create flexibility and make it easier to maintain proper form. Changing your grip on the handlebars will take the stress off of over-used muscles and redistribute pressure to different nerves.

Wrist/Forearm Pain or Numbness — Ride with your elbows slightly bent (never ride with your arms locked or straight). When you hit bumps in the road, your bent elbows will act as shock absorbers. This is also where changing hand positions will help reduce pain or numbness. Two common wrist overuse injuries, Cyclist's Palsy and Carpal Tunnel Syndrome, can be prevented by alternating the pressure from the inside to the outsides of your palms and making sure wrists do not drop below the handlebars. In addition, padded gloves and stretching your hands and wrists before riding will also help.

Urogenital Problems — One common complaint from male riders who spend a lot of time riding is pudendal neuropathy, a numbness or pain in the genital or rectal area. It is typically caused by compression of the blood supply to the genital region. A wider seat, one with padding, one with part of the seat removed, changing the tilt of the seat, or using padded cycling shorts will all help to relieve pressure

on the pudendal nerve and blood supply. Male riders who spend a lot of time riding also may experience a higher risk of urogenital problems, such as erectile dysfunction and infertility.

Foot Numbness and Tingling — Foot numbness and tingling are common complaints. Shoes that are too tight or narrow are often the cause. In addition, foot numbness can be due to exertional compartment syndrome. This arises from increased pressure in the lower leg and resulting compression of nerves. The diagnosis is made by pressure measurements and is treated with surgical release.

WHEN SHOULD I SEEK CARE FROM A PHYSICIAN?

Any injury that is accompanied by bleeding, severe pain, loss of sensation, or an increased weakness should be seen by a physician. Other pain due to overuse or mild injuries can be treated by rest and taking pain relievers such as ibuprofen or acetaminophen. Swelling and pain can also be treated with alternating ice and heat therapy.

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