

Wheels on the Trail

A FEW YEARS AGO, while attending a running camp at Lake Tahoe, I had my first introduction to mountain biking. I decided to add it to my repertoire of outdoor sports. It was not long before I had my first “over the handlebars” fall, fortunately with no serious consequences.

Although road cycling and mountain biking may seem similar, the medical issues affecting road cyclists and mountain/off road bikers are quite distinct. The former, of course, are subject to severe collisions with motor vehicles, the cause of most serious injuries and deaths. Mountain biking has its own set of problems.

As in any sport, one set of issues for riders is “overuse” injuries. “Neuropathy” is a general term for irritation of a peripheral nerve that causes symptoms ranging from tingling and numbness to weakness or paralysis. (One’s arm “falling asleep” is a form of neuropathy.) Neuropathies involving the forearm are common in cyclists, and may be produced by stretching, pressure, or continuous vibration. Neuropathies involving the genital area and nearby upper legs are also common, especially in males. These may become very bothersome.

Both types of neuropathy relate to bike fit, posture, clothing (padding), weight, time on the bike, and terrain. It is difficult to find a health-care provider who can address most of these. The best advice is to seek out a good specialty store for your bike purchase, and work with a knowledgeable expert to ensure an appropriately fitted bike and good protective clothing. Once you have sealed that relationship with a purchase, then he or she should be willing to work with you at “tweaking” things in response to these or similar ailments.

Mountain bikers are also subject to overuse injuries involving the knee. “Patellofemoral pain syndrome” (PFPS) is a common complaint in a number of sports, including cycling.



Ann Hough

It is characterized by pain in the vicinity of the kneecap. Like neuropathies, PFPS can be exacerbated by “fit” on the bike. Adjusting the saddle to modify the distance to the pedals, and thus the range of knee movement during pedaling, can usually improve the problem. Again, however, this is usually within the purview of the bike expert, not the physician.

Overuse injuries of the neck, lower back, and Achilles tendon are also common in cyclists. Physical therapy and pain medications generally help, but as with any overuse ailment, cutting back on one’s riding time is ultimately needed.

While the above may limit one’s enjoyment of mountain biking, they are certainly not as dramatic as the acute injuries, virtually all of which result from falls. Good data on these types of injuries are difficult to find, since many reports do not distinguish the type of riding. For example, there are “down-hill” racers, whose injury frequency dwarfs that of the more casual recreational rider.

The most devastating consequences of falls, of course, are spinal injuries. Most of these, unfortunately, are in

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the part of the spine in the neck, so the possibility of extensive paralysis is present.

A variety of fractures occur in mountain biking, the bulk of these being to the arms. Many of these are simple, like the Colles (wrist) fracture that was the subject of an earlier column (January-February 2015). Falls can produce dramatic lacerations, which because of dirt may be tetanus-prone. Biking can produce deep bruises, in which a lot of fluid can accumulate under the skin, even without a fracture or laceration.

Mountain biking is a terrific way to combine a love of the woods with heavy exercise. As an aerobic “bang for the buck,” a couple hours on a bike trail provides much more than a casual hike. As with most sports, doing it safely starts with good equipment and clothing, properly fitted. As with hiking, be sure someone at home knows where you’re going and when you’ll be back! ▲

Tom Welch, MD, is professor and chair of pediatrics at Upstate Medical University in Syracuse and an active member of the Wilderness Medical Society. He is a licensed professional guide and a certifying instructor for the Wilderness Education Association, and has guided groups in the Adirondacks, Montana, and Alaska. More information is available at his website and blog: www.adirondoc.com.