

# **Extended Bicycling: Hazardous To Erections**

By Michael Castleman

Exercise is good for sex. Regular exercisers report fewer sex problems and more enjoyment of lovemaking. But the latest research suggests that extended cycling—more than three hours a week on a standard bike seat—can cause erection impairment. Fortunately, men who love to ride can still enjoy their sport without erection problems—if they're careful about how they sit on their bikes.

# **Pedaling to Erection Impairment**

As early as the fourth century B.C., Hippocrates speculated that long-duration horseback riding might cause erection problems. His observation was largely forgotten—until case reports began popping up of erection problems in healthy young men who had no risk factors—except a devotion to bicycle riding.

Subsequent studies suggested an unusually high risk of erection problems in longdistance bicycle racers. Danish researchers surveyed 800 bicycle racers. More than 300 of these healthy young men (38 percent) reported difficulty raising erections for a few days after races.

Researchers involved in the Massachusetts Male Aging Study investigated bicycling and erection dysfunction among the study's 1,709 participants. Riding less than three hours a week was not associated with erection difficulties. In fact, occasional or short-duration riding significantly *reduced* risk of erection problems. However, bicycling more than three hours a week raised risk 72 percent above average in all age groups.

### Why Bicycling Raises Risk of Erection Impairment

When you sit, you bear your weight on the bones of you buttocks (the ischial tuberosities or "sit bones"), which have no nerves, arteries, or organs attached to them. But most bicycle saddles are too narrow to reach the sit bones. As a result, most cyclists bear their weight on the area *between* the sit bones, the perineum, the

line of soft tissue between the scrotum and anus. Sit on the perineum long enough, and you risk erection problems.

The good news is that your penis is actually twice as long as you think it is. The bad news is that half of it resides deep within your pelvis. Like the roots of a tree, the internal penis gives the penis structural stability so erections don't buckle as they enter erotic openings. The internal penis also contains nerves and arteries involved in erection. Straddling a narrow bicycle seat compresses these nerves and the arteries that supply blood to the penis. Nerve compression may produce numbness of the external penis. Arterial compression may limit blood flow into the organ. Either or both can compromise erections. Recent studies show that standard long narrow bike saddles reduce blood and oxygen flow to the penis by about 70 percent within a few minutes.

Worse yet, over time, compression of the arteries that run through the perineum can actually injure them, causing the development of deposits (plaques) that narrow them, limiting blood flow. Elite bicyclists have few plaques in their other arteries, but often have significant plaque formation in the arteries of the perineum. Localized plaques may also result from arterial injury that occurs when men slip off the pedals and fall on to bicycle seats or crossbars.

Studies to date show that men who ride less than three hours a week are unlikely to develop persistent numbness of the penis, localized plaques, or erection difficulties. But men who ride longer are at considerable risk. "There are only two kinds of long-distance male cyclists," says Boston urologist Irwin Goldstein, who has researched the link between riding and sex problems, "those who have erection problems, and those who will have them."

The first sign of trouble is numbress or tingling after riding. These sensations indicate that blood flow and nerve conduction to the penis have been compromised.

# **Better Bike Seats**

Since the link between narrow bike seats and erection problems came to light, the bicycling industry has been pedaling furiously to develop seats that don't cause this problem. But fancy split seats or saddles with holes in the center may not be any better than traditional bike seats. The key is to take weight off the perineum and sit on the sit bones. The key to accomplishing this is to sit on a *wide* bike seat. These seats may not look sexy, but they're the best way to preserve sexual function.

In addition, tilt your seat down and your handlebars up. That way you sit in an upright position instead of leaning forward, which compresses the nerves and arteries of the internal penis. It also helps to ride standing from time to time.

So far, all the research on this issue has focused on men. However, the female perineum contains the same arteries and nerves, and narrow bike saddles can be presumed to have the same effects: numbness, reduced blood flow and nerve conduction to the clitoris, and problems with sexual function.

### **References**:

Blakeslee, S. "Serious Riders, Your Bicycle Seat May Affect Your Love Life," *New York Times*, 10-4-2005.

Deutsch, G. "Guarding Your Gearshift," Men's Fitness, 8-1996.

Goldstein, I. "Erectile Dysfunction and Bicycling," *Focus on Sexual Health Medicine*, Winter-Spring 2002.

Marceau, L et al. "Does Bicycling Contribute to Risk of Erectile Dysfunction? Results from the Massachusetts Male Aging Study," *International Journal of Impotence Research* (2001) 13:298.

Randrup, E and N Baum. "Bicycle Riding as a Cause of Erectile Dysfunction," *Medical Aspects of Human Sexuality*, 11-2000, p. 23.