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A Release Valve for Cyclists' Unrelenting Pressure

By JOHN TIERNEY

Before the [Tour de France](#) begins this weekend, before the cameras follow all those seemingly virile athletes, let us consider another sort of role model on two wheels.

Robert Brown is an officer in the Seattle Police Department's bicycle patrol, which lacks the sleek machines and tight jerseys of the Tour de France. But Mr. Brown has something that could be more important to both male and female cyclists: a no-nose saddle.

Like most cyclists, Mr. Brown at first didn't see any need to switch from the traditional saddle on the mountain bike he'd been riding full time for five years on the force. When researchers at the National Institute for Occupational Safety and Health and Safety offered new noseless saddles intended to prevent [erectile dysfunction](#), he quickly told his supervisor, "No problems here!"

But then, after trying the new saddle, he felt the difference. His weight rested on his pelvic bones instead of the crotch area, which formerly pressed against the saddle's nose. During his sleep, when he wore a monitor, the measure known as "percent of time erect" increased to 28 percent from 18 percent.

The results made him permanently switch to a no-nose saddle, as did most of the other bike-patrol police officers in Seattle and other cities who took part in the six-month experiment. But they've had little luck converting their colleagues, as Mr. Brown complains in the current newsletter of the International Police Mountain Bike Association.

"The subject matter always draws juvenile chuckles," he writes. "They don't even listen long to understand what part of a man's anatomy is being protected here."

It's the area of soft tissue called the perineum, and it's not just a male problem — female cyclists have also reported soreness and numbness in this genital region. But neither sex seems interested in these saddles, and I'm as baffled as Mr. Brown is by their apathy.

I've spent much of my journalistic career debunking health scares, but the bike-saddle menace struck me as a no-brainer when I first heard about it. Why, if you had an easy alternative, would

you take *any* risk with that part of the anatomy? Even if you didn't feel any symptoms, even if you didn't believe the researchers' warnings, even if you thought it was perfectly healthy to feel numb during a ride — why not switch just for comfort's sake? Why go on crushing your crotch?

When I tried a no-nose model for my 16-mile daily commute, it was so much more comfortable that I promptly threw away the old saddle. But over the years I've had zero success persuading any other cyclists to switch, even when I quote the painfully succinct warning from Steven Schrader, the reproductive physiologist at Niosh who did the experiment with police officers.

“There's as much penis inside the body as outside,” Dr. Schrader told me. “When you sit on a regular bike saddle, you're sitting on your penis.”

More precisely, according to Dr. Schrader's measurements, you are putting 25 to 40 percent of your body's weight on the nerves and blood vessels near the surface of the perineum. “That part of the body was never meant to bear pressure,” Dr. Schrader said. “Within a few minutes the blood oxygen levels go down by 80 percent.”

Dr. Schrader has documented the results with the help of a couple of pieces of equipment, the biothesiometer and the Rigiscan.

“The biothesiometer is a device in which the men set their penis into a trough, and it slowly starts to vibrate,” he explained. “They push the button when they can feel the vibration. While it sounds delightful, it's actually not. The Rigiscan is a machine the men wear at night that grabs the penis about every 15 seconds to see if it's erect. It's not as pleasant as it sounds, either.”

In one early study with the Rigiscan, Dr. Schrader found that police officers patrolling on bikes with conventional saddles tended to have shorter erections than did noncyclists. Then, in a [2008 study titled “Cutting Off the Nose to Save the Penis,”](#) he reported the results of having Mr. Brown and the other officers switch to new designs.

Before the study, nearly three-quarters of the officers complained of numbness while riding. After six months, fewer than one-fifth complained. They did better on the biothesiometer test of sensitivity and also reported improved erectile function.

Unlike Mr. Brown, the typical officer in the study showed no improvement in the nighttime Rigiscan measure. A fan of traditional saddles might interpret that as reason not to change saddles, but Dr. Schrader sees it as evidence that some effects of a conventional saddle may be slow, or impossible, to reverse.

In another study, Dr. Marsha Guess and Dr. Kathleen Connell, who are urogynecologists at Yale, [found that that more than 60 percent of female cyclists](#) using nosed saddles reported symptoms

of [genital pain, numbness and tingling](#). Lab tests recorded lower levels of genital sensation in the cyclists than in a control group of runners. These researchers also report, in a forthcoming paper, that saddles with a “partial cutout” — an indentation or a small opening — may be counterproductive because they increase pressure on a woman’s genital area.

The [accumulating evidence has led Niosh to recommend](#) that police officers and other workers on bicycles use a no-nose saddle that puts pressure on the “sit bones.” Examples include the [BiSaddle](#) (used by Mr. Brown), the [I.S.M.](#) (a favorite of police officers in Chicago), the [Hobson Easyseat](#), the [Spiderflex](#), [Ergo’s The Seat](#), and other models listed at [HealthyCycling.org](#).)

But few cyclists are paying attention. Peter Flax, the editor in chief of [Bicycling](#) magazine, told me that he knew of no serious racers who complained about erectile dysfunction, and that problems with numbness could almost always be corrected by adjusting the saddle.

“I suppose there’s a small niche of people for whom a noseless saddle might be a solution,” Mr. Flax said. “But a saddle without a nose has real problems in terms of function. A cyclist can make turns using the weight in the hips against the nose. I just don’t think a noseless saddle is safe in a race.”

Mr. Brown and other police officers insist that they’ve learned to maneuver perfectly well with no-nose saddles. But even if the racers really do get a crucial advantage from the traditional saddle, why is everyone else still using it? People in spin classes don’t have to steer their bikes anywhere, so why are they still sitting on their perineums?

It’s possible the problem isn’t as serious as the researchers believe, but I see other reasons for the indifference. We all tend to underestimate the danger from old-fashioned, familiar technologies, particularly when the effects aren’t immediately obvious. Young athletes focus on victory today, not the future damage to their bodies. And if the winner of the Tour de France doesn’t ride a no-nose saddle, then neither will riders who want to look like him.

“Serious bike riders would be totally embarrassed to show up at a race in a noseless saddle,” Mr. Flax said.

The embarrassment factor extends to bike shops, too, as Jim Bombardier discovered in trying to sell his invention, the BiSaddle. Mr. Bombardier, who lives in Portland, Ore., went to stores armed with scientific papers and diagrams, but no one was interested. One shop owner took a look at his new saddle and summarized the marketing problem:

“This saddle screams out: *I’ve got a problem*. Who needs that in a bike shop?”

Well, there’s a certain logic to that retail strategy, at least for the short term. But if you’re in it for

the long term, if you'd like your customers to keep cycling — and creating new customers — then it pays to protect the perineum.