



2007

Back in the Saddle Again: How to Prevent Cycling Saddle Sores

Michael G. Miller

Western Michigan University, michael.g.miller@wmich.edu

David C. Berry

Weber State University

Follow this and additional works at: http://scholarworks.wmich.edu/humanperformance_faculty



Part of the [Sports Sciences Commons](#)

WMU ScholarWorks Citation

Miller, Michael G. and Berry, David C., "Back in the Saddle Again: How to Prevent Cycling Saddle Sores" (2007). *Human Performance and Health Education Faculty Research*. Paper 8.

http://scholarworks.wmich.edu/humanperformance_faculty/8

This Article is brought to you for free and open access by the Human Performance and Health Education at ScholarWorks at WMU. It has been accepted for inclusion in Human Performance and Health Education Faculty Research by an authorized administrator of ScholarWorks at WMU. For more information, please contact maira.bundza@wmich.edu.



Back in the Saddle Again: How to Prevent Cycling Saddle Sores

Michael G. Miller, EdD, ATC, CSCS • Western Michigan University
David C. Berry, PhD, ATC • Weber State University

MANY INDIVIDUALS CYCLE, competitively or recreationally, for enjoyment or to increase fitness. Although cycling can increase overall cardiovascular fitness while imposing minimal stress on the lower extremity joints, cycling for an extended period of time may render an individual susceptible to undesirable conditions, including tendonitis, bursitis, nerve pathology, impotence, and more commonly, saddle (seat) soreness. Saddle sores usually present as skin lesions of the inner groin and inguinal fold, which are commonly classified into three categories on the basis of severity: (a) chafing, (b) skin ulcerations, and (c) furuncles and folliculitis.¹⁻² The purpose of this report is to discuss different types of saddle sores that afflict cyclists and to inform clinicians about strategies cyclists can employ to prevent the development of these sores.

The least severe type of saddle sore, chafing, arises from rubbing of the skin of the inner thigh and groin against the saddle during pedaling. Chafing usually occurs because the cyclist's saddle is too wide. Skin ulcerations are small "crater-like" lesions that result from damage to the outside layer of the skin, which is particularly susceptible to infections because of its moist environment and elevated temperature in the groin area. A furuncle is an infection at the base of a hair follicle, and folliculitis is a boil that looks and feels like a pimple. These conditions, which usually develop in the groin folds, can be very painful. They develop when skin irritations are not appropriately managed

or from skin shaving, which can allow entry of microorganisms into the follicle.

Cyclists who spend an extended period of time on a saddle are at greatest risk for developing saddle sores, which are primarily caused by excessive pressure applied to the inner thighs by body weight. Body weight is not the only cause, however. In most cases, saddle sores develop through a combination of chronic sweating, rubbing of the skin, increased body temperature, general irritation,³ lack of groin lubrication, and recently shaven skin. Other factors include poorly constructed saddles or shorts, saddles that are improperly positioned (either tilted upward or downward), and unclean cycling clothing.

There are several strategies for the prevention of saddle sores (Table 1). First, saddles should be placed in the proper position, usually a neutral or level position (Figure 1). Pointing the saddle nose upward may limit some soreness but it will place undue stress on the perineum (especially in males). Pointing the nose of the saddle downward predisposes the cyclist to slide forward and imposes stress on the upper extremity musculature. However, slight variations in either direction are common. Second, a cyclist should purchase a saddle of correct width (too wide can place undue pressure on the inner thighs), shape, and size.⁴ To determine the appropriate saddle configuration, consult with the management of a local bicycle shop. Third, saddles should be changed once every year or two, depending on the length of time spent on the saddle and number of miles ridden,⁵ because saddles lose cushioning and structural support over time.

TABLE 1. RECOMMENDATIONS TO PREVENT THE DEVELOPMENT OF SADDLES SORES

1. Have correct saddle type and proper bike fit.
2. Apply lubricants to minimize rubbing or chafing.
3. Wash all cycling gear after each use.
4. Wear high quality cycling shorts with a good chamois.
5. Do not wear regular undergarments while using cycling shorts, as the seams of the underwear can cause saddle sores.



Figure 2 Correct cycling body posture.



Figure 1 Saddle in a level position.

Correct bike fittings can also decrease the likelihood of saddle soreness. Cyclists should work closely with professionals trained in correct cycling body posture. For example, to properly fit a bike, the rider's foot is placed on the pedal in the six o'clock position with the knee flexed to 15-20° (Figure 2). In addition, beginning cyclists need to build tolerance for skin pressure by riding in the saddle for short periods of time and gradually extending the duration of rides. Periodically standing during a ride helps to decrease pressure on the inner thighs. Cyclists should also consider wearing bike shorts that have seamless stitching and pressure relief pads in the lining of the groin, particularly when riding for an extended period of time.

The application of a lubricant, such as Bag Balm®, Bodyglide®, Chamois BUTTR®, and Sportslick® to the

skin of the inner thigh and groin and to the interior of bike shorts is a common anecdotal remedy. Some cyclists suggest applying antifungal and antibiotic creams/lotions and/or other steroidal creams as preventive measures. However, research has not shown this to be any more effective than other types of lubrication.⁶ Finally, and most importantly, cyclists need to keep the groin area clean and dry after riding and should wash bike shorts in soap and water after each use to avoid bacterial growth.

Cyclists who develop saddle sores must be diligent in administration of self-care to limit pain, discomfort, and loss of riding time (Table 2). Sores usually heal in a couple of days, depending upon the severity. In some cases, saddle sores limit the ability to ride and walk normally. In these instances, riders may need to restrict movements that impose mechanical stress on the area. Limited riding duration or alternative cross training activities may be necessary to allow the sores to heal. The traumatized area should be washed with soap and water, and an antibiotic cream that includes a pain-relieving formula should be applied to the area. Warm compresses and antimicrobial therapy can be used to decrease the symptoms of folliculitis. In severe cases, such as sores that persist for more than one week, open sores, or sores that cause extreme pain, cyclists need to seek medical care to avoid infection and other complications.

Cyclists ride for many reasons, including fitness, competition, and fun. One factor they all have in

TABLE 2. RECOMMENDATIONS FOR TREATING SADDLE SORES

1. Apply antibiotic or antimicrobial creams as necessary.
2. Limit biking or other activities that cause discomfort.
3. Apply warm compresses.
4. Seek medical referral with cases lasting longer than a week.
5. Gradually increase riding time on the saddle.
6. Wear high quality bike shorts with seamless stitching and pressure relief pads.

common is susceptibility to the development of saddle sores when seated for an extended period of time. Clinicians can help cyclists limit the risk of developing sores by encouraging several very easy preventive measures. Properly sizing the saddle and bike, periodic

periods of standing in the saddle, comfortable bike shorts, and proper hygiene will allow cyclists of all ages and abilities to ride for extended periods of time. ■

References

1. Weiss BD. Clinical syndromes associated with bicycle seats. *Clin Sports Med.* 1994;13(1):175-186.
2. Cycling saddle sores. *Sports Med Digest.* 1994;16(10):7.
3. Mellion MB. Common cycling injuries: management and prevention. *Sports Med.* 1991;11:52-70.
4. Keytel LR, Noakes TD. Effects of a novel bicycle saddles on symptoms and comfort in cyclists. *S Afr Med J.* 2002;92:295-298.
5. Weiss BD. Nontraumatic injuries in amateur long distance bicyclists. *Am J Sports Med.* 1985;13:187-192.
6. Weiss BD. Skin creams for alleviating seat pain in amateur long-distance bicyclists. *Sports Med Train Rehab.* 1993;4:27-32.

Michael Miller is an associate professor and Athletic Training Graduate Program Director at Western Michigan University. His research interests include clinical education, aquatic therapy, electrical stimulation, and strength and conditioning.

David Berry is an assistant professor and Coordinator of Clinical Education at Weber State University, Ogden, UT. His research interests include athletic training clinical education, injury prevention, and technology.

LET US HELP YOU..



- MANUFACTURER OF CUSTOM FOOT ORTHOTICS.
- SUPPLIER OF A FULL LINE OF FOOT RELATED ITEMS: MOLESKIN, FELTS, FOAMS, PRECUT PADS, TURF TOE PLATES, REPLACEMENT INSOLES, FOOT SPLINTS AND HEEL CUPS, CRADLES & LIFTS.

WHEN YOU THINK FEET....

THINK FOOT MANAGEMENT

Put Us On Your Bid List!

800-HOT-FOOT



Email Us:

info@footmanagement.com

Shop at:

www.FootManagement.com