TECHNICAL/LEGAL/HEALTH YOUR QUESTIONS OUR ANSWERS



— MEET THE EXPERTS—



CTC Technical Officer and qualified engineer



DR MATT BROOKS

Cycling GF

PAUL KITSON Partner from Slater and Gordon (UK) LLP



Stretching exercises before and after a ride can help with hamstring bursitis

[HEALTH] Hamstring bursitis

Q Since March 2012, I've had a hamstring bursa. My GP advised cessation of all exercise plus Ibuprofen cream and tablets. After six months, the problem remained. My GP advised resumption of activities with the advice 'to listen to my body'. I am back cycling medium distances but I am wary of putting my knee under too much stress on the hills. Prior to this bursa, I was regularly cycling 50 to 70 miles, and in 2011 managed a tour across the Pyrenees. Is the bursa likely to rupture under the stress of riding up hills or mountains? NAME AND ADDRESS SUPPLIED

Abursa is a fluid-filled sac that usually occurs over joints, or between tendons and bones, in order to reduce friction between surfaces. When a bursa becomes inflamed, it is usually painful and swollen. This is bursitis.

Although there are very many bursae in the human body, two (ischiogluteal and pes anserine) most often cause problems in the hamstring area. The hamstring muscles are at the back of the upper leg and serve to bend the knee and straighten the hip.

Ischiogluteal bursitis causes pain in the lower buttock and is made worse by sitting. Pes anserine bursitis causes pain on the inside of the leg just below the knee. They can result from repetitive motion such as cycling or running, and may be exacerbated by tight hamstrings, over-training and excessive force.

Initial treatment should be to rest the affected area and apply an ice pack. Pain and swelling may be eased with antiinflammatory medication such as ibuprofen. Stretching exercises before and after a ride, along with strengthening exercises, can help. Some types of bursitis respond to a steroid (cortisone) injection.

Many cases resolve within a few weeks or months. In your case, the bursitis sounds more prolonged. You won't 'eliminate the bursa' as it is meant to be there. What you are trying to do is suppress the inflammation. Increase your activity level gradually, as long as the pain does not recur. Your GP's advice to 'listen to your body' is sensible. If you find the problem recurs, consult a physiotherapist.

I haven't come across a bursa rupturing while cycling, but it may provoke the bursitis to flare up. **DR MATT BROOKS**



Send health and legal questions to the Editor (details on p78). We regret that Cycle magazine cannot answer unpublished health and legal queries. Technical and general enquiries, however, are a CTC membership service. Contact the CTC Information Office, tel: **0844 736 8450, cycling@ctc.org.uk** (general enquiries) or Chris Juden, **technical@ctc.org.uk** (technical enquiries). You can also write to: CTC, Parklands, Railton Road, Guildford, GU2 9JX. And don't forget that CTC operates a free-to-members advice line for personal injury claims, tel: 0844 736 8452.



[LEGAL] Careless driving injustice

Q I was knocked off my bike, causing minor injuries, when a car turned right across my path at a crossroads. This was seen by a witness, who gave a statement.

But the police response has been unsatisfactory. Initially, they would not record it as an injury accident. When they did investigate the matter, I was told that they would not be taking any action against the driver because I had not been using a nearby cycle track. They also said there wasn't enough evidence to charge the driver. What would be enough evidence? NAME AND ADDRESS SUPPLIED

A In my experience, the police and/or Crown Prosecution Service (CPS) often fail to take proceedings against motorists, unless the actions of the motorist have resulted in death or serious personal injuries to the cyclist involved. Even in serious cases, the CPS may not allocate resources to prosecute a motoring offence. They will do so only if they consider that they have a good chance of a conviction. In the criminal courts, the

CPS have to prove their case 'beyond all reasonable doubt'. This is a high burden of proof and it is often difficult to convince magistrates or a jury. To prove a case of careless driving, the prosecution needs to prove that the standard of driving fell below what would be expected of 'a competent and careful driver'. To prove a case of dangerous driving, the prosecution need to prove that the standard of driving fell 'far below' what would be expected such a driver 'and that it would be obvious to a competent and careful driver that driving in that way would be dangerous'.

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In this case, I see no reason why the prosecution cannot be pursued. The fact that the CTC member was not using a nearby cycle track is irrelevant. What is at issue here is the standard of driving of the motorist and not the actions of the injured cyclist. It is worth complaining to the police and the CPS in an effort to persuade them to reconsider their decision not to prosecute the motorist.

In any event, it is worth pursuing a civil claim against the motorist through the CTC legal services scheme. The limitation period for pursuing personal injury claim is three years from the date of the accident. Call the CTC Accident Line on 0844 736 8452. PAUL KITSON

[TECHNICAL]

Mavic wear indicators I have Mavic A719 wheel rims which have done about 4,500 miles. I have noticed particularly on the front wheel there is wear on the on the braking surface of the rims. Mavic indicate on their website there are wear indicators on the inside of the rim but I am unable to find them. I should be pleased if you can advise how I can find the indicators or assess how much wear has taken place so that a decision can be made as to whether the rims need replacing. MIKE GILBERT

A Mavic cut a notch, about 1mm deep, into the inside of each tyre retaining flange, at one place on the circumference. When brake wear has removed all but 1mm of metal from the outside of those flanges, small holes will appear in the braking surfaces at this location, If you lose Mavic's decal indicating where the wear indicators are, remove the tyre to find the internal notches first one side, then the other. The place to look out for these holes is indicated either on the rim decal or notches cut in the outside of the rim, just above where the holes will eventually appear. If in doubt (a decal may peel off), remove the tyre and search inside the rim for those internal notches. Then put your own mark on the outside. **CHRIS JUDEN**







[TECHNICAL] Replacing a rim

A Provided a replacement rim is the same height and similar width as the one that needs replacing, the same spokes can be used without unlacing. Simply attach the new rim alongside the old (with tape or twist-ties, spoke and valve holes lined up) and undo all the spoke nipples. But first, pluck a few spokes to get an idea of what note they should make.

When you're about halfway through removing nipples, the assembly becomes sloppy enough on the hub that you can start to transfer spokes to corresponding holes in the new rim. Screw on each nipple about half as many turns as it typically took to remove one. How many turns isn't critical, so long as it's the same for every spoke. With the new rim now completely spoked, but loosely, discard the old rim and starting from the valve hole, go once around the rim tightening every nipple one more turn. And repeat, until the spokes are just slightly taut.

Provided you have tightened every nipple exactly the same number of turns, the rim should run pretty true at this finger-tight stage, but it won't be exact, so put it in the bike and make adjustments until it is true. (You'll need to slacken off the brakes, or even remove the blocks.) First pull down any rim high spots by tightening a few spokes from both sides in that area, each side the same number of whole turns. Then correct any wobbles toward one side by tightening a few spokes from the opposite side of the hub, by quarter turns.

When the rim is true to within 1mm, measure sideways how far it is from, for example, the right brake arm. Take out the wheel and put it back the wrong way round. Measure again. If it's further away, go around the wheel (from the valve hole) tightening just the spokes on this same side by a half or quarter turn. Or if it's closer tighten the other side's spokes. Repeat until you've halved that original error and make a note of how far the rim is now from the right brake arm etc. Take out the wheel and put it back the correct way round. The rim should now be in the same place (if it isn't, you know what to do).

Make any small necessary adjustments to get the rim within ½mm of true sideways and then also as good as that up and down. Don't strive for perfection. It's better have a bit of hop than extreme differences in spoke tension (e.g. from trying to straighten a slightly squiffy rim joint).

Now put on the tension, initially one turn on each spoke, starting

Replacing a rim is much easier than building a wheel from scratch. Tape the rims together then start undoing the spoke nipples

Lithium-ion batteries are better stored with about 40% charge rather than fully charged and ending at the valve hole. Repeat, going round the wheel one way then the other, until the sound made by the spokes is like you heard before. Then give them all half a turn for good measure. If you want to be precise and have a musical ear, consult John Allen's web page on Spoke Tension by Ear – or get a tensiometer. I possess neither, but haven't broken a spoke in any wheel I've built for 25 years.

In most wheels the spokes form groups of four. Grasp a group at its 'waist' and squeeze hard (wear a glove if it hurts too much). There should be a bit of pinging and popping as these spokes and others are 'stress relieved'. Go around the wheel doing each group twice.

The wheel will now be slightly out of true. Just take out the sideways wobbles by fractions of a turn on relevant spokes – maybe a bit of loosening as well as tightening. Sense and locate those wobbles with the side of your thumb, rested against a brake arm etc. And if a spoke appears to be twisting with the nipple, turn a bit further then back off to relieve the twist.

Eventually a wheel that's laterally true to ¼mm, and radially to ½mm, is achievable by a careful and methodical first-time amateur. And that's quite good enough. But if it all goes horribly wrong you'll at least have saved some of the wheelbuilder's time – though he might not admit it! CHRIS JUDEN

[TECHNICAL]

Charging Li-Ions In the Oct/Nov issue there is a grouptest of rechargeable lights and the author says that it's a good idea to top up Li-ion batteries when not in use. This statement needs a bit of qualification. Maximum life is obtained from these batteries by storing them at about 40% charge when not in use. Ideally they should also be stored in a cool place. The self discharge rate is very low, so only a short charge should be necessary and very infrequently (e.g. a couple of months). If topped up means a 100% charge, that's not a good idea for long-term storage.

JOHN HADDOCK