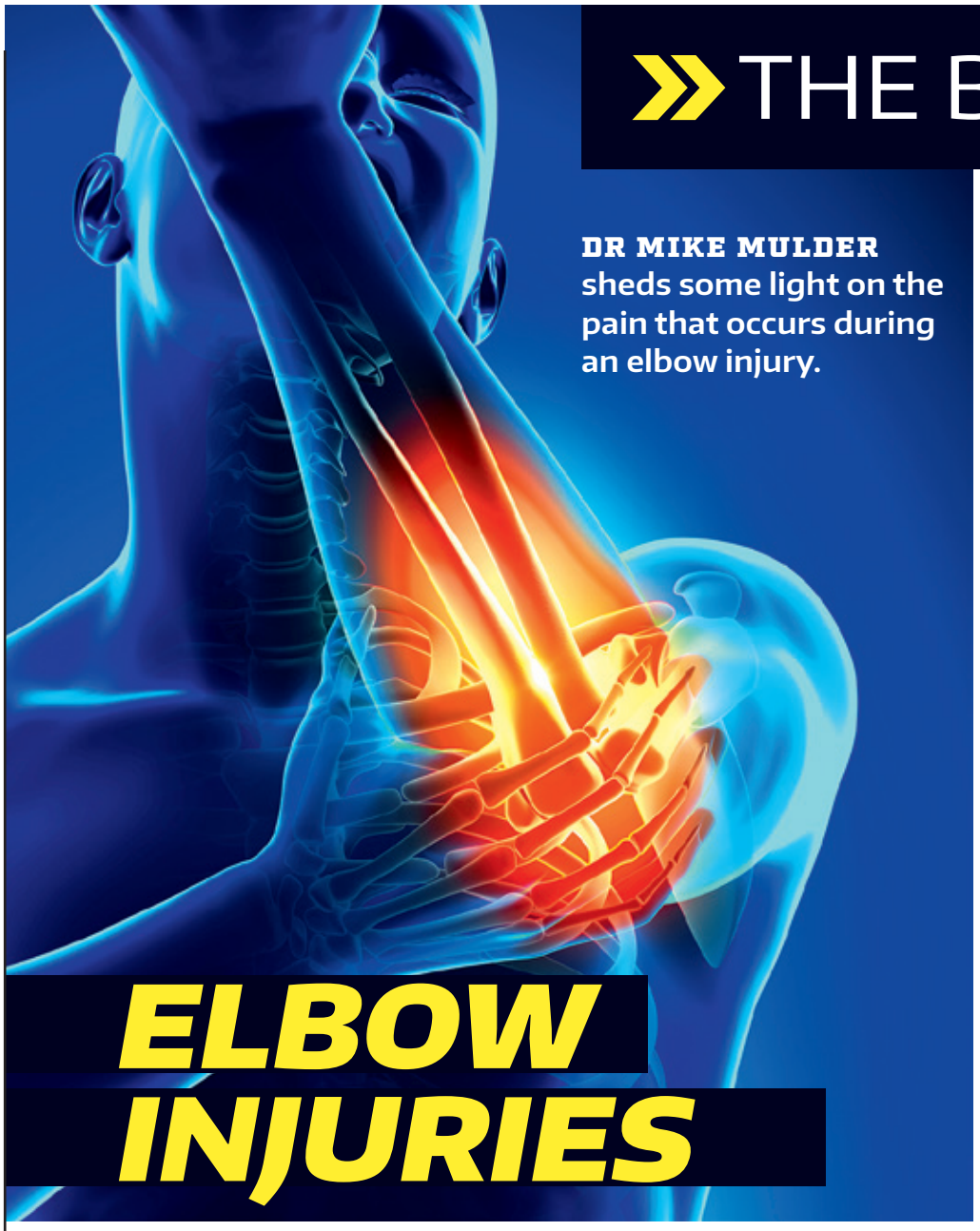


THE BONE DOCTOR

ELBOW INJURIES

DR MIKE MULDER sheds some light on the pain that occurs during an elbow injury.

I am afraid that my column can contribute little to this month's celebration of women in mountain biking. I am pleased to report that there is almost no discrimination between women and men when it comes to injuries. Rocks, roots and gravel will hurt equally, regardless of your gender.

I briefly entertained the idea of trying to wax lyrical about other issues specific to women in cycling, but realised that I was out of my depth and so will stick to what I know.

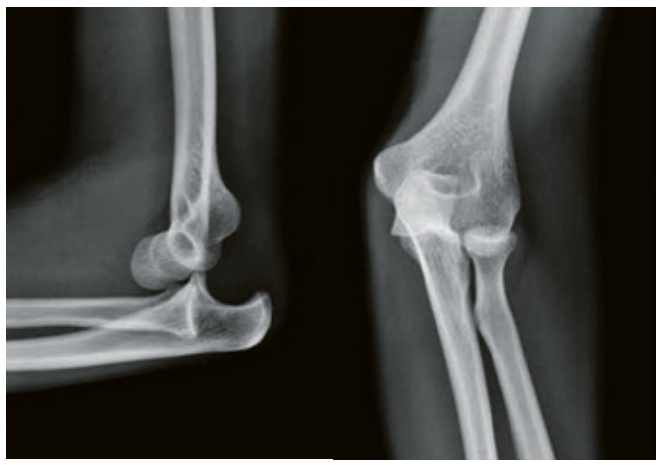
I will instead, focus on injuries to the elbow.

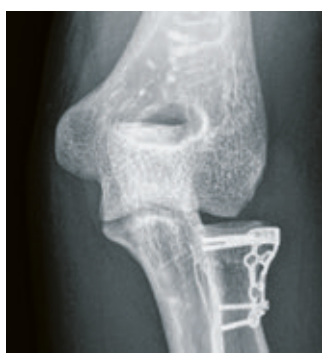
The elbow is a complex hinge joint, which allows motion in two planes – flexion/extension and rotation of the forearm and hand. It comprises the lower end of the humerus and the upper end of the two forearm bones namely the radius and the ulna. The flexibility of the shoulder above and the co-ordination of the arm mean that injuries to it are relatively uncommon.

MORE THAN JUST A FLESH WOUND

The most common "injuries" to elbows are superficial abrasions or "roasties". Their presence is almost as characteristic to mountain bikers as shaved legs are to roadies. They are seldom serious but beware those that occur over the back of the elbow where the triceps muscle attaches. There is a protective pocket (called a bursa) which lies between the scrotal looking skin at the back of the elbow and underlying bone, and this may become inflamed and impressively swollen following impact. (Elbow guards offer excellent protection against this.) If you do come down hard on your elbow, regular ice and compression for a day or two could save you the frustration of developing olecranon bursitis.

Should you develop the fluid filled swelling at the back of the elbow, compression and anti-inflammatories are the first step. Putting a needle in to drain the accumulated liquid is performed should it not settle, but is risky as it may introduce infection.





TOP: An injured elbow can mean loads of pain. **ABOVE:** Riders might consider wearing an elbow guard to protect their elbows.

A BROKEN PIVOT

A fracture of the radial head or neck is one of the most common and frustrating injuries sustained during a fall. The upper part of the radius bone lies on the side of the elbow furthest from the body, and is the pivot around which your forearm rotates when you twist your hand in a palm up to palm down motion. Any fall can produce a fracture to this bone, but commonly it occurs during clumsy, awkward, often low speed falls such as failing to get your foot out the cleat. There is an immediate discomfort in the elbow, but you are able to get up and continue riding, thinking that you got off with a bruise. However, as bleeding from the fracture fills the joint cavity, one develops a progressive pain, swelling and stiffness, so that by three to four hours after the injury you can no longer rotate your forearm or bend your elbow, necessitating a trip to the emergency unit.

Fortunately the radial component of the elbow joint is very forgiving; very few of these injuries are severe enough to warrant surgical fixation. In most cases surgeons will recommend a period of immobilisation in a sling or possibly a temporary splint (if very painful), followed by therapy to encourage the return of motion. This process may take as long as six to eight weeks and during this time it is too painful and awkward to ride your bike. It is rare to develop long term issues from such fractures.

A variety of other fractures may also occur during falls; typically there will be serious pain and an inability to move the elbow. It is best to splint the arm and get medical help. As far as possible, try to see a surgeon who has a special interest in the area you have injured, the delay may save you time in terms of recovery and frustration.

UNCOUPLED!

Dislocation of the elbow tends to occur with high speed or high energy falls. This produces a dramatic, gross deformity of the arm and a serious amount of pain. If it happens, it is best to splint the arm and get straight to the closest emergency unit where they will confirm the injury with an x-ray before reducing the elbow. There is no room for heroic, trail-side manoeuvres, rather leave this to the professionals who have more effective painkillers.

It is worth having the elbow evaluated by a specialist after it is reduced. In most cases the recovery is uncomplicated involving rehabilitation and therapy alone, however in a small number of cases ligament injuries may persist and be the cause of long term elbow pain and disability.

IT IS JUST NOT TENNIS

Although it is a condition which follows a repetitive strain and not an injury, it is worth sharing a few facts about tennis elbow as it is common and immensely annoying to those who suffer from it. It is characterized by pain starting at the bony point on the outside of the elbow and radiating down the forearm. It is caused by a degeneration of a tendon to one of the forearm muscles and hurts with elevation of the wrist and rotation of the forearm. Incorrect bike fitment or a sudden increase in time (or both) may lead to its development. If you have these immediately following a fall it is unlikely to be true tennis elbow and I would suggest getting confirmation of the diagnosis.

Fortunately in most cases tennis elbow resolves on its own without the need for surgery, but may take as long as six to nine months to do so. A multitude of treatments can be tried to reduce the symptoms, including physiotherapy, dry needling, anti-inflammatory medication and cortisone injections. None will speed its departure, but all have value in reducing your frustration.

Although surgery is curative, avoid the temptation to go for the "quick fix" and allow it to settle on its own.

Elbow injuries may keep you off the bike or deprive you of the enjoyment of riding for a while, but fortunately they are seldom serious enough to need surgery.

Stay warm and safe this winter. fs

Dr Mike Mulder *is an orthopaedic surgeon specialising in the treatment of shoulder, elbow and hand disorders and injuries. He is based at Constantiaberg Mediclinic, and is a member of The Cape Shoulder and Elbow Unit. He has a wealth of experience in fixing injured cyclists and is an avid mountain biker. He rides as often as his wife and family let him.*