

» THE BONE DOCTOR

One of our most insightful columnist's **DR MIKE MULDER** wraps up his Full Sus stint with a piece regarding the dreaded shoulder injury.

The shoulder is the area most commonly injured when riders hit the deck, with clavicle fractures comprising the bulk of these injuries. In this, my final contribution to *Full Sus*, I will reveal some other injuries that can result from a fall onto the shoulder.

As much as I hate to acknowledge it, age often determines the consequence of a fall; younger riders often walk away with a story to impress their mates, while those of us with more miles on the clock end up with a gruesome x-ray to post on social media! Nowhere is this truer than at the shoulder.

The shoulder is a "ball and socket" joint between the humerus and the scapula, it is often safe from injury due to its flexibility and ability to absorb the impact. Unfortunately "freak" injuries do happen; and the three injuries which I see as a consequence are dislocations, fractures and rotator cuff injuries.

DISLOCATIONS

A true dislocation is when the humeral "ball" pops out of the socket and is different from a separation of the AC joint (the joint linking the collarbone to the shoulder blade). This injury results in severe pain, a grossly deformed shoulder; the rider is aware that something is seriously out of place. It is a sufficiently common injury that many people have either seen or experienced first hand and there is a huge temptation to just "pop it back". Unless gifted with x-ray eyes, it is impossible to know if there is an associated fracture, so "blind" bush reductions are unwise where the victim can easily get to a hospital. Of course it is different if you are miles from nowhere or the victim has previously suffered a dislocation and is certain that this is a repeat.

Dislocations are definitely not a benign event! Everything is not back to normal once the ball is back in the socket. There are serious consequences to a shoulder dislocation in both youngsters and in veterans and masters; it is not just a case of seeing a physio and getting back in the saddle. Go and see a shoulder specialist. It is important that associated problems like ligament tears, fractures and muscle tears are identified, clarified and managed. Fortunately not

all these problems require a surgical solution, but where they do – earlier is better.

FRACTURES

The complexity and closely matched surfaces of the ball and socket joint means that fractures of these are frustrating injuries. Humeral head fractures are uncommon, but not rare, and usually result from falling against a rock or tree. Deciding on the best way

SHOULDER INJURIES

"AGE MAY BRING WISDOM, BUT IT DOESN'T DO YOUR TENDONS ANY GOOD."

to treat these fractures requires experience, so you are better off with someone who treats such injuries often. Fortunately most of are treated with rest, a sling and physiotherapy, but you won't be back on the bike for quite a while (three to six months, at least).

Where the fracture is bad enough to require surgery, brace yourself for a long slog back to full movement; you will become well acquainted with both your physio and your indoor trainer.

THE ROTATOR CUFF

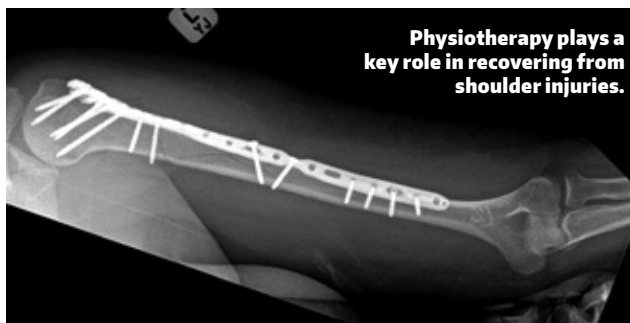
The rotator cuff is the name given to a group of four muscles which attach to the top, front and back of the "ball" of the humerus. Their contraction, either individually or combined, result in the elevation or rotation of your arm. The vulnerable part of the rotator cuff is the attachment of the tendon onto the bone of the humerus. Violent contraction, combined with a fall or shoulder dislocation may cause these muscles to partially or completely detach from the bone.

The clue that you have a complete rotator cuff injury is that you cannot lift your arm or can only do so by using your other arm. Trying to lift it will

Shoulder fractures often require surgery, but recovery takes time.



Physiotherapy plays a key role in recovering from shoulder injuries.



be painful and it will feel like a dead weight. With partial tears it is possible to lift, but there will be pain and weakness.

Ultrasound and MRI scans are used to confirm the extent of the damage. Partial tears and smaller complete tears are (usually) treated with rest, physio and cortisone injections.

Patience is key, the injury will heal but it may take months before raising your arm is pain free.

Age may bring wisdom, but it doesn't do your tendons any good. Increasing age increases the likelihood that you sustain a complete rotator cuff tear after a fall. In cases where the tendon is detached, it is unlikely to heal on its own and surgery to reattach it is necessary. This is performed with a keyhole technique (arthroscopy) but recovery will take the best part of four to six months!

From the above it should be clear that if you are going to fall on your shoulder... aim for you collar bone as the recovery is far less complicated. An even better plan however is to stay on the bike, stay safe and avoid the need to see people like me. **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.

