Injecting joints of race horses IS IT WORTH THE RISK?

Professor Chris Whitton BVSc FANZCVS PhD Equine Centre, The University of Melbourne

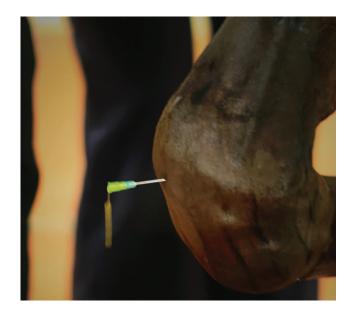
Head of Equine Centre Specialist in Equine Surgery

Repeated injections of corticosteroids into joints can increase the risk of injury and research is beginning to show why.

The limbs of equine athletes are subjected to huge loads when galloping. In one stride at maximum speed the fetlock joint alone experiences the impact of about 4 tonnes (this is like the weight of three VW Golfs). Obviously, wear and tear of the bone, cartilage, ligaments and tendons around the joint is frequent and this results in joint pain and inflammation. Corticosteroid injections into joints (intra-articular or IA) are a common treatment, but trainers and connections should be aware that repeated injections can actually increase the risk of further injury.

Vets at a well-known thoroughbred practice in the UK reviewed their records recently and found that horses given more than two IA injections had twice the risk of fracture compared to horses that had fewer injections, particularly within the few months following treatment. This review, to be published in an upcoming issue of the Equine Veterinary Journal, reflects a very similar situation in Victoria.

A study performed by the University of Melbourne found that horses receiving two or more injections of corticosteroids into the joint were also at double the risk of any musculoskeletal injury. But, perhaps even more importantly, this was on top of a four-fold increased risk in horses that were only treated once. We know that corticosteroids are a valuable class of medicines, that can decrease inflammation and in so doing benefit cartilage health. There is no evidence that the drug has any direct detrimental effects on the cartilage or bone.



The problem is not with the cartilage but with the bone underneath it. Many horses showing signs of pain in a joint are doing so because of microscopic damage ('microdamage') to this bone. Low levels of microdamage are of no consequence but if allowed to continue to accumulate injury can develop. Treatments that settle the inflammation and reduce pain, allow training and racing to continue. This means that the bone does not repair properly and further damage accumulates.

On average, over a seven week period one in 50 horses will develop a limb injury that will put them out of training for at least six months. When IA treatment is performed this injury rate increases to one in six. Although horses might get back to racing after injury, many only do so at a lower level of performance due to ongoing issues with the injured joint.

Three months rest may be a safer and more economical option than joint injections when injury first occurs, given the risks exposed by the evidence gathered from careful research. The more often a horse is treated the greater the risk. Trainers and connections need to consider this important data when making treatment decisions.

Veterinary Department - Racing Victoria veterinaryadmin@racingvictoria.net.au rv.racing.com

