Equine Sacroiliac Joint Injury

As an equine physiotherapist with a research background in the sacroiliac joint, I am often asked to treat horses that are suspected to have an injury in their sacroiliac joint region. Sacroiliac joint injury can be acute and/or traumatic, such as injury following a fall onto the pelvis, or from jumping out of racing barriers. The injury can be low-grade, or more chronic, sometimes resulting from ‘microdamage’ due to repetitive forces being transferred through the joint, as in dressage and show jumping.

The sacroiliac joint is situated within the horse’s pelvis. All the propulsive forces a horse generates from its hind limbs are transferred through the pelvis, via the sacroiliac joint surfaces and ligaments, to the spine and trunk. Therefore, it makes sense that if there is an injury or dysfunction to the sacroiliac region, it will affect the horse’s ability to generate and transfer those powerful propulsive forces when in work.

Often the owner’s complaint will be that the horse is performing poorly, or there is a mild hind limb lameness present. Sometimes other causes of lameness have been investigated, with no clear outcome.

Traumatic injury to the pelvis may result in more marked lameness and visible muscle wasting over the pelvis. Horses may or may not have back pain or stiffness with a sacroiliac joint injury.

DIAGNOSIS

It is vital to have the sacroiliac joint injury correctly diagnosed, and to be able to differentiate it from other causes of poor performance or hind limb lameness. This is to ensure appropriate treatment.

Unfortunately diagnosis of sacroiliac joint injury is difficult due to the fact that the joint is situated deep in the horses’ pelvis, with a massive amount of muscle and bone covering the area. This makes scanning, x-ray, or injection of the joint rather difficult. Consequently, often the diagnosis of sacroiliac joint injury is reached only when all other causes of hind limb lameness or poor performance have been ruled out.

My own research, at the University of Queensland, has helped shed some light onto an area of the horse that has been somewhat murky with respect to diagnosis and successful treatment. The research involved a range of horses, from racehorses at the Hong Kong Jockey club, to local dressage horses and showjumpers, and even Australian brumbies. We found that horses with sacroiliac injury had some consistent similarities.

Equine Sacroiliac Joint Injury by Lesley Goff, PhD www.animalphysio.com.au

Horses had difficulty stabilising their weight on the hind limb of the injured side, and showed altered hind limb gait patterns, most commonly a ‘plaiting’ gait. Asymmetry of the pelvic bones and muscles, and pain response on deep touch in the gluteal muscle region were graded to indicate severity of sacroiliac joint injury. Using ultrasound, we also found differences between the appearance of the left and right dorsal sacroiliac ligament - a ligament important for transfer of propulsive forces from the hind limb.

However, not one of these above mentioned findings could be considered to be diagnostic for sacroiliac joint injury alone - they are part of a battery of tests to help practitioners better diagnose sacroiliac joint injury.

If your horse appears to have a combination of these signs, then there may be a sacroiliac joint injury present.

ABOUT THE AUTHOR: Dr. Lesley Goff is one of the world’s leading Equine Physiotherapists. Lesley has presented her research on the equine sacroiliac joint and physiotherapy techniques at Australian and International Conferences. Her lectures are popular amongst physiotherapists and veterinarians as well as riders. Lesley practices near Toowoomba, Queensland.

BARASTOC COMPETITOR

When your horse is competing, their nutritional needs are higher. Formulated by Kentucky Equine Research, Barastoc Competitor uses a wide range of fast and slow release energy sources, including fat and super fibres beet pulp and soy hulls. Formulated for all classes of performance horses, Barastoc Competitor will keep your horse fuelled for any situation.

- Contains beet pulp for slow release energy
- Easy to feed, oats free pellet
- Added yeast culture and Lysosorb® for enhanced digestibility
- Vegetable oils promote healthy skin and coat condition
- Organic chromium to help maintain exercise tolerance

The team at Fairview love Barastoc’s new feed. Not only do the horses love the taste but they’ve competed well, have a shiny coat and lovely leg lines. The feed is easy to use and there’s no need to wet it down!”

Becky Allen, Showjumper

WHATEVER THE HORSE, WE CAN FEED IT.
1300 866 657 | barastochorse.com.au
Importantly, if you suspect the horse has a sacroiliac joint injury, especially when there is a mild hind limb lameness present, the hind limb joints below the pelvis must be ruled out as contributing to the lameness.

TREATMENT OF SACROILIAC JOINT DISEASE

Successful treatment of the equine sacroiliac joint depends firstly on the accuracy of the diagnosis - there is no use treating a sacroiliac joint if the problem is arising from a painful or stiff hock!

Once sacroiliac injury has been diagnosed, the practitioner that the rider or owner chooses to treat the horse, will be required to add movement dysfunction at the sacroiliac joint, which may be due either too little movement (joint stiffness) or too much mobility at the sacroiliac joint (joint laxity).

The practitioner will need to assess skeletal and muscular asymmetries, and provide manipulation, mobilisation or soft tissue techniques to begin to help restore more optimal biomechanics of the sacroiliac region.

If the injury is acute or traumatic then veterinary prescription of medication may be required.

Finally, the practitioner will need to develop an appropriate and specific program of exercise and rehabilitation for the horse. Qualified equine physiotherapists are ideally placed to manage a sacroiliac joint injury in the horse. As all equine physiotherapists are firstly qualified and practising human physiotherapists, they bring their skills from treating human injuries, to the horse. Physiotherapists are experts at developing rehabilitation programs to ensure the best long term outcome for the horse.

For further reading on this topic, refer to RIRDC report SACROILIAC KINEMATICS IN HORSES by: Dr Catherine McGowan, Ms Lesley Goff, Dr Thomas McGowan, Dr Ian Jaseiwicz, Mr Peter Condie and Prof. Ian Jeffcott. Code: 10-157, Published 19 August 2010, ISBN 978-1-74254-124-2