

# Managing Spinal Trauma in Race Horses



**Successful rehabilitation from injury usually results in a physically well balanced horse that is more likely to remain sound in its legs, to race and eat up well, and to recover quickly from each race.**

Firstly spinal trauma is very common. So common that the symptoms are often just put down to bad behaviour or bad attitude. The process of birth, falls, pulling back when tied up, working with poor posture, pulling, being cast, bits, saddles, riders, hoof care and teeth all affect the health of the spine, sometimes dramatically.

To get the best out of your horse its spine needs to be functioning very well. Even mild spinal damage can turn a horse with the athletic potential to be a group 1 performer into one struggling at group 3. Without special veterinary spinal training the trauma and its effects are often not all that apparent, or are hard to sort out from attitude problems.

Spinal trauma usually leads to stiffness of the damaged regions of the spine. The stiffness is usually because of injury to spinal joints and discs rather than spinal and other back muscles. Spinal joint damage is associated with disturbed spinal cord and spinal nerve function. Such dysfunction commonly causes the tight and sore muscles or muscle wastage seen with back problems.

Tight muscles can completely unbalance a horse, leading to uneven pressure on limb joints and tendons. Bowed tendons, knee chips and other forms of breakdown can result. Tender muscles and painful, restricted spinal joints can cause the horse to be nervy, sour and overall behave badly, especially if the saddle and girth impacts on affected muscles.

Massaging the tender muscles can give temporary relief to the muscular tightness and soreness. However the underlying problems of spinal joint dysfunction usually do not change and the muscle tightness and soreness readily returns. Often too the only symptoms are spinal joint stiffness with the muscles seemingly being normal. Special veterinary training is required to diagnose specific spinal mobility dysfunction.

Treatments used for spinal problems are usually much more effective if they specifically target the individual faulty joints and muscles. Also, the more specific a treatment is, the less likely there will be damage to other parts of the spine which are stressed by having to compensate for a damaged area.

The common methods of pulling legs out and whipping necks around to free up locked up areas of the spine are shotgun approaches that do not require a specific diagnosis, making them a relatively quick and easy way of dealing with spinal stiffness and soreness. However, like most shortcuts these methods have their downsides. Whole regions of the spine are stretched rapidly at once including those areas that are already stressed and inflamed by having to compensate for the restricted joints. Used once or twice in a young animal which recovers quickly from trauma can give an easy result. Repeated use over time often causes an overall worsening of the condition of the spine. Sometimes shotgun approaches make horses considerably worse from the outset. Lameness or severe head-shyness can result. Other downsides include the fact that some parts of the spine just cannot be treated adequately by shotgun treatments.

Spinal rehabilitation in horses is complex just as it is in humans. Many options are now available. In the last 20 years many scientific and specific approaches have been progressively developed. We now have veterinary chiropractic, veterinary osteopathy, veterinary acupuncture, equine physiotherapy, myofascial release therapies, including trigger point and Bowen based therapies, acupressure, stretching techniques, the use of cortisone, tildren and other drugs and so on. The most outstanding of these newer therapies have been the use of very specific, short lever, high velocity chiropractic ("real chiropractic" adjustments), equine osteopathy and acupuncture. These latter options are particularly powerful means of "re-programming" the function of the spine and spinal nerves, and make it possible to successfully treat most common spinal trauma. The downside is that these more specific and powerful treatments require more time to be spent on diagnosis. Most of the diagnosis is done by manual palpation.

To diagnose spinal problems with a reasonable degree of certainty a highly educated background knowledge of spinal function and pathology is needed.

### Indicators of spinal trauma in racehorses include\*

- Erratic performance – good some days, poor others.
- “Not wanting to race anymore”
- Hanging, especially on bends or at the end of races.
- Pulling in work
- Being girthy – mild to severe
- Being difficult when being rugged
- Only racing well one way
- Fading at the end of races
- Poor recovery from races
- “Bad attitude”, difficult, nervy.
- Being slow to jump out of barriers
- Uneven gait
- Uneven height of upper tips of the pelvis (tuber sacrale)
- Being prone to repeated bouts of shin soreness
- Poor eaters
- Being prone to gastric ulcers
- Poor coat
- Tail swishing
- Jumping crookedly
- Leg interference
- Going down on bumpers
- Problems holding up one or more legs while being shod.

\* It should be noted that a good number of these symptoms can be caused by a many things including shoeing problems, leg injuries, dental problems, nutritional problems and so on. However under good management conditions the spine is a highly likely source.