

Back Pain

As with people, back pain can be frustratingly elusive to pinpoint and notoriously difficult to cure. Signs and symptoms can be numerous, variable and conflicting! They can also be intermittent.

The equine back is a large, complex structure. The bones are linked by synovial facet joints and fibrous intervertebral discs. Support is provided by the supraspinous, interspinous and



the ventral longitudinal ligaments. The longissimus dorsi together with the multifidus and other vertebral muscles move and stabilise the spine.

DISCOMFORT IN THE LUMBAR-SACRAL REGION



The angles of the spinous processes change at the lumbo sacral junction. This can often be felt as a wider gap between the spinous processes.

The lumbo-sacral junction is the point at which the sixth lumbar and first sacral vertebra meet. It is a hinge joint. Approximately 20 degrees of flexion makes this the most flexible part of the spine after the neck and tail. This allows the horse to round his back and tilt his pelvis during canter and gallop. There is no sideways flexion or rotation here. For the horse to move well it is important that this joint is not impeded in any way.



You can see this joint being flexed to its maximum in the sliding western halt!

SOME CAUSES OF BACK PAIN ARE:

- Muscle, tendon or ligament strain and osteoarthritic conditions.
- Asymmetrical movement as a result of pain, discomfort, injury or weakness from somewhere else within in the body, for example hindlimb lameness.
- Repetitive strain injuries. Performing similar or asymmetrical movements repeated often in a poor posture.
- Poor posture and way of going, usually associated with weak core stability and reduced range of movement.
- Compensating for rider imbalance.
- Compensating for altered movement patterns.
- Unbalanced feet or shoeing.
- Ill fitting saddles which can rub, cause pressure, irritate the skin or cause nerve problems.
- Injury caused by moving suddenly and beyond the normal range of movement maybe twisting, turning sharply, slipping, falling or jumping awkwardly.

Try to avoid repetition of asymmetrical movements such as always getting on from the same side.



SIGNS AND SYMPTOMS INCLUDE:

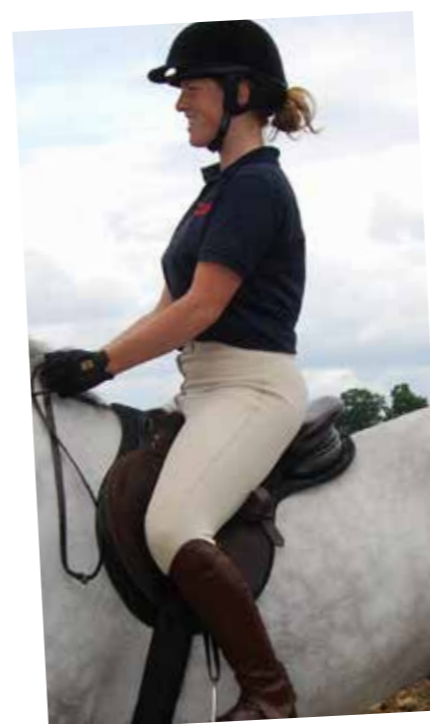
- Areas of muscle spasm
- Soreness to the touch
- Inexplicably resisting previously enjoyed activities, for example grooming or massaging.
- Rolling more
- Constantly resting a leg or shifting weight when standing still
- Dipping the back whilst being mounted
- Reluctance to work
- Either wanting to or showing reluctance to stretching the neck down
- General loss of mobility
- Displaying an awkward posture or appearing stiff
- Favouring one canter lead, constantly changing legs or being disunited
- Change in temperament

FURTHER SIGNS OF BACK PAIN CAN INCLUDE:

- Any form of lameness however mild
- Reduced hind limb power and impulsion, often characterised by the inability to track up
- Unequal pushing from the hind leg. This could be as a result of right or left leg dominance
- Dragging the toes
- Holding the tail to the affected side
- Asymmetry of the tuber coxae
- Muscle wasting
- Unequal weight bearing on the front feet
- Crooked movement

TOP TIPS FOR COPING WITH AND PREVENTING BACK PAIN

- Eliminate simple causes first. Check saddle fit and rider position
- Train progressively, especially with young horses.
- Spend plenty of time warming up in walk.
- Canter before you trot, especially if your horse is stiff. Canter is a best gait to mobilise the back.
- Attempt to identify any movements that induce pain, and take steps to avoid them.



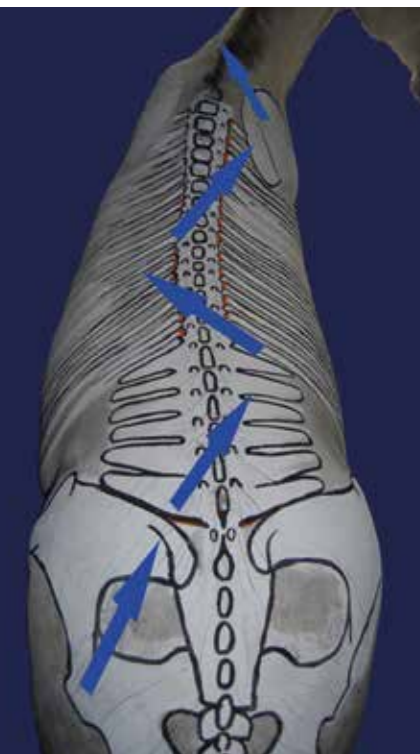
HOW MUSCLES COMPENSATE IN HORSES WITH BACK PAIN

In horses that have weak core strength, the work of the multifidus may be replaced by that of the longissimus dorsi which is a movement rather than a postural muscle. This causes the back to be held in a more rigid posture resulting in stiffness and poor performance.

It is always a good idea to call the vet if you suspect back pain particularly as there are many more serious reasons for back pain such as fractures, kissing spines or arthritis to name but a few.

Muscle damage causes the muscle cells to release enzymes detectable by a blood test. The result can give some indication of the severity of the damage. Drugs may be prescribed to relieve pain and inflammation. Manipulation, massage, heat treatment and physiotherapy can all help.

Once back pain has been identified the course of action follows diagnosis. It will almost certainly involve rest followed by controlled exercise. It may include anti-inflammatory or other prescribed medication. Massage and physiotherapy can be helpful. Re-education is required to avoid recurrence of the problem.



COMPETITION:

To win a copy of *The Horses Inside Out DVD Movement from the Anatomical Perspective*, just answer the following question and e mail your answer to gillian@horsesinsideout.com.

Question: Name the most flexible joint in the spine after the neck and tail.



GILLIAN HIGGINS

Gillian runs movement, pilates and stretching, anatomy and biomechanics courses for riders, saddlers and therapists in the East Midlands and further afield. She also gives horse and rider assessments. For more details and to learn more about Gillian's books visit www.HorsesInsideOut.com

October 7th/ 8th - Applied Anatomy and Biomechanics for All! Leicestershire
24th and 25th February 2018
 Horses Inside Out Annual Conference Structure and Function, Loughborough

Next month I will be showing exercises which are useful to help reduce discomfort in the back and increase back mobility, flexibility and strength.

REFLEXES

Reflex points - If your vets suggest you enlist the help of a therapist, they will almost certainly test the horse's reflex points. The horse will react by either rounding or hollowing the back. This is similar to the 'jerk' produced when your knee is tapped. There are also reflex points which create a sideways movement. **These are not an indication of pain.** Rather the opposite. They are a natural reaction to stimuli and an indication that the muscles are functioning correctly. Be very wary of any therapist who leads you to believe they are identifying then instantly 'curing' back pain!