

## The Equine Back

Horses with back pain can present with a wide variety of symptoms. These can range from obvious signs such as pain when the back is groomed or when rugs or tack are placed, through to very subtle signs such as reluctance to accept the bit during ridden work, inability to maintain canter work, general poor performance or even changes in general behaviour.



### Anatomy

The equine back consists on average of 54 vertebrae divided into five sections; cervical (neck), thoracic (chest), lumbar (mid back, saddle region), sacral (pelvic region), coccygeal (head of the tail). The total number of vertebrae can be variable depending on breed and individual horse.

### Assessment

Initial assessment should include a thorough history from the owner and a full examination of the horse including assessment of the horse lunging and under saddle. Evidence of lameness, muscle wastage, asymmetrical muscling of the back, neck or gluteal region may all be as a result of, or in fact be an underlying factor contributing to back pain. Low grade, long term lameness often results in secondary back pain due to subtle compensatory changes in gait.

### Imaging and Diagnostics

In order to treat back pain, the exact source must be identified. Examination may identify a general area of pain and is useful in assessment of general muscular involvement. Due to the large muscle mass surrounding the spine imaging the area can be difficult. The thoracic and lumbar region of the back can be radiographed (x-rays) but it is impossible to radiograph the pelvis and sacral region of the spine without anaesthetising the horse. The area of the back in the pelvic area and the pelvis are usually imaged via ultrasonography. Ultrasonography can be useful in gaining information about soft tissue structures and bony structures.

In certain cases local anaesthetic can be instilled carefully around areas of suspected pain and the horse reassessed after the area has been 'numbed'.

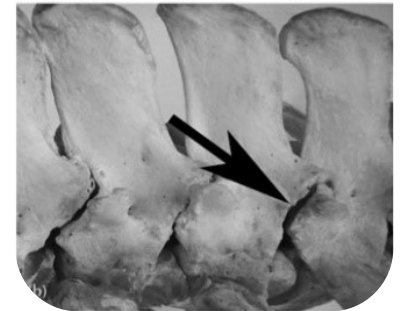
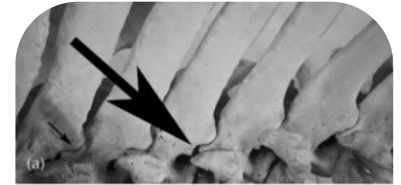
### Problems of the Back

The type of horse and activity may predispose to the type of condition seen. Long backed thoroughbred or sport horse types may be more likely to suffer with soft tissue injuries compared to shorter backed individuals in which over riding dorsal spinous processes may be more likely.

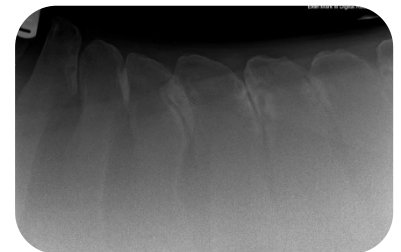
- Sway back – Also known as 'Lordosis' is a ventral deviation of the spine. The appearance of a 'dipped back'. This may develop in aged horses and ponies and is frequently observed in broodmares. Although this deformity can be severe it rarely causes a clinical problem.
- Roach back – The opposite of sway back (Kyphosis), is a dorsal deviation of the spine. This is usually a developmental defect and can occasionally occur as a result of limb deformities in foals.



- Congenital spinal disorders are rare but can include fusion of several spinal vertebrae causing reduced range of motion or abnormally shaped vertebrae which will cause marked spinal deformities.
- Degenerative disease (spondylosis, osteoarthritis) can affect the joints of the back. Osteoarthritis of the articular facet joints or ventral spondylosis (new bone bridging the ventral aspect of adjacent vertebral bodies) may occur in older horses.
- Overriding Dorsal Spinous processes (Kissing spines) is commonly blamed for back pain. The spinous processes or sections of the bone attached to the vertebrae are too close together and can impinge on each other.



Degenerative Disease



Overriding Dorsal Spinous Processes

### Treatments

Whatever the diagnosis, physiotherapy, rehabilitation and change in work are all likely to be beneficial and should be used in combination with other treatment. Soft tissue problems can benefit from additional treatment such as shockwave therapy. Pain originating from bony problems are more likely to benefit from treatments such as steroid injections or, in extreme cases, surgery.

Whatever type of work you and your horse do, simple daily stretches can be beneficial. It's an easy way of assessing and maintaining the flexibility of your horse and if any problems do arise you are more likely to notice them before they get serious.

[MKTG/Equine/Collateral/EquineInformation/The Equine Back](#)



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